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SESSION 1908

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Asylums, Report	41	"
Bee-Keepers' Association, Report	20	*Printed.*
Births, Marriages and Deaths, Report	7	"
Blind Institute, Report	12	"
Bridges on Spanish and Sauble Rivers	69	*Not printed.*
Children, Neglected, Report	35	*Printed.*
Civil Servants, dismissals, resignations, etc.	73	*Not printed.*
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Spanish and Sauble Rivers, Bridges over	69	*Not printed.*

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No. 1. . Public Accounts of the Province for the year 1907. Presented to the Legislature, 2nd March, 1908. *Printed.*

No. 2. . Estimates for the service of the Province until the Estimates of the year are finally passed. Presented to the Legislature, 6th February, 1908. *Not printed.* Estimates for the year 1908. Presented to the Legislature, 6th March, 1908. *Printed.* Estimates (Supplementary), for the year 1908. Presented to the Legislature, 6th April, 1908. *Printed.*

No. 3. . Report of the Minister of Lands, Forests and Mines of the Province for the year 1907. Presented to the Legislature 1st April, 1908. *Printed.*

No. 4. . Report of the Bureau of Mines for the year 1907. Presented to the Legislature, 1st April, 1908. *Printed.*

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No. 5. . Report of the Commissioners for the Queen Victoria Niagara Falls Park, for the year 1907. Presented to the Legislature, 21st February, 1908.

No. 6. . Report of the Minister of Public Works for the year 1907. Presented to the Legislature, 9th March, 1908. *Printed.*

No. 7. . Report of the Registrar General relating to the Registration of Births, Marriages and Deaths for the year 1906. Presented to the Legislature, 9th March, 1908. *Printed.*

No. 8. . Report of the Temiskaming and Northern Ontario Railway Commission for the year 1907. Presented to the Legislature, 21st February, 1908. *Printed.*

No. 9. . Report of the Ontario Railway and Municipal Board for the year 1907. Presented to the Legislature, 21st February, 1908. *Printed.*

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No. 14. . Report of the Ontario Agricultural College and Experimental Farm, for the year 1907. Presented to the Legislature, 20th March, 1908. *Printed.*

No, 15. . Report of the Ontario Agricultural and Experimental Union of the Province, for the year 1907. Presented to the Legislature, 20th March, 1908. *Printed.*

No. 16. . Report of the Fruit Growers' Associations of the Province, for the year 1907. Presented to the Legislature, 2nd April, 1908. *Printed.*

No. 17. . Report of the Fruit Experimental Stations of the Province, for the year 1907. Presented to the Legislature, 2nd April, 1908. *Printed.*

No. 18. . Report of the Vegetable Growers' Association for the year 1907. Presented to the Legislature, 31st March, 1908. *Printed.*

No. 19. . Report of the Entomological Society, for the year 1907. Presented to the Legislature, 3rd March, 1908. *Printed.*

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No. 21. . Report of the Dairymen's Associations of the Province, for the year 1907. Presented to the Legislature, 2nd April, 1908. *Printed.*

No. 22. . Report of the Live Stock Associations of the Province, for the year 1907. Presented to the Legislature, 2nd April, 1908. *Printed.*

No. 23. . Report of the Poultry Institute of the Province, for the year 1907. Presented to the Legislature, 2nd April, 1908. *Printed.*

No. 24. . Report of Women's Institutes of the Province, for the year 1907. Presented to the Legislature, 23rd March, 1908. *Printed.*

No. 25. . Report of the Farmers' Institutes of the Province, for the year 1907. Presented to the Legislature, 23rd March, 1908. *Printed.*

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No. 27. . Reports of the Horticultural Societies of the Province, for the year 1907. Presented to the Legislature, 2nd April, 1908. *Printed.*

No. 28. . Report of the Bureau of Industries of the Province, for the year 1907. Presented to the Legislature, 2nd April, 1908. *Printed.*

No. 29. . Report of the Inspectors of Factories for the year 1907. Presented to the Legislature, 2nd April, 1908. *Printed.*

No. 30. . Report of the Bureau of Labour for the year 1907. Presented to the Legislature, 20th March, 1908. *Printed.*

No. 31. . Report on Highway Improvement for the year 1907. Presented to the Legislature, 21st February, 1908. *Printed.*

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No. 32. . Report of the Ontario Game and Fisheries Commission, for the year 1907. Presented to the Legislature, 18th March, 1908. *Printed.*

No. 33. . Report on the Women's Institutes of the Province for the year 1907. Presented to the Legislature, 23rd March, 1908. *Printed for Distribution only.*

No. 34. . Report upon the Archives of the Province, for the year 1907. Presented to the Legislature, 2nd April, 1908. *Printed.*

No. 35. . Report of Work relating to Neglected and Dependent Children of Ontario, for the year 1907. Presented to the Legislature, 16th March, 1908. *Printed.*

No. 36. . Report of the Provincial Board of Health, for the year 1907. Presented to the Legislature, 9th March, 1908. *Printed.*

No. 37. . Report of the Inspector of Division Courts, for the year 1907. Presented to the Legislature, 20th March, 1908. *Printed.*

No. 38. . Report of the Inspector of Legal Offices, for the year 1907. Presented to the Legislature, 12th March, 1908. *Printed.*

No. 39. . Report of the Inspector of Registry Offices, for the year 1907. Presented to the Legislature, 2nd April, 1908. *Printed.*

No. 40. . Report of the Secretary and Registrar of the Province, for the year 1907. Presented to the Legislature, 2nd April, 1908. *Printed.*

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No. 41. . Report upon the Hospitals for the Insane, Idiotic and Epileptic, of the Province, for the year ending 30th September, 1907. Presented to the Legislature, 31st March, 1908. *Printed.*

No. 42. . Report upon the Prisons and Reformatories of the Province, for the year ending 30th September, 1907. Presented to the Legislature, 31st March, 1908. *Printed.*

No. 43. . Report upon the Hospitals, Refuges and Charities of the Province, for the year ending 30th September, 1907. Presented to the Legislature, 21st February, 1908. *Printed.*

No. 44. . Report upon the Operation of Liquor License Acts, for the year 1907. Presented to the Legislature, 21st February, 1908. *Printed.*

No 45. . Report of the Provincial Municipal Auditor, for the year 1907. Presented to the Legislature, 21st February, 1908. *Printed.*

No. 46. . Supplementary Return from the Records of the several Elections in the Electoral Divisions of West York, Dufferin and Brockville, since the General Elections on January 25th, 1905, shewing: (1) The number of Votes Polled for each Candidate in the Electoral District in which there was a contest; (2) The majority whereby each successful Candidate was returned; (3) The total number of votes polled in each District; (4) The number of votes remaining unpolled; (5) The number of names on the Voters' Lists in each District. Presented to the Legislature, 6th February, 1908. *Printed.*

No. 47. . Report upon the state of the Library. Presented to the Legislature, 6th February, 1908. *Not printed.*

No. 48. . Report of the Hydro-Electric Power Commission of the Province, on the Cost of Power for the year 1907. Presented to the Legislature, 20th March, 1908. *Printed.*

No. 49. . Report upon Prison Labour. Presented to the Legislature, 5th February, 1908. *Printed.*

No. 50. . The Arbitration on the Unsettled Accounts, between the Dominion of Canada and the Provinces of Ontario and Quebec, Presented to the Legislature, 21st February, 1908. *Printed.*

No. 51. . Statement of Receipts and Disbursements of the Temiskaming and Northern Ontario Railway, on account of construction, for the year 1907. Presented to the Legislature, 21st February, 1908. *Printed.*

No. 52. . Report of the Commission on the Methods employed in the caring for and treating the Insane. Presented to the Legislature, 20th March, 1908. *Printed.*

No. 53. . Copies of Orders-in-Council and Regulations of the Department of Education. Presented to the Legislature, 11th February, 1908. *Not printed.*

No. 54. . Rules and Regulations under the Succession Duties Act, being 7 Edw. VII., cap. 10. Presented to the Legislature, 19th February, 1908. *Printed for distribution only.*

No. 55. . Copies of Orders in Council fixing fees payable to Surrogate Judges of County of Middlesex; amounts payable to Judges McTavish and Gunn out of the Surrogate Court fees, County of Carleton, and authorizing payment of surplus Surrogate fees, County of Grey, to His Honour, Judge Widdifield. Presented to the Legislature, 21st February, 1908. *Not printed.*

No. 56. . Return to an Order of the House of the Twenty-first day of February instant; for a Return, shewing list of Fair Associations to which expert Judges were sent by the Department of Agriculture during the past two years; the names of the Judges with copies of reports made to the Department from each local exhibition board. Presented to the Legislature, 25th February, 1908. Mr. *May. Not printed.*

No. 57. . Return to an Order of the House of the twenty-eighth day of February, for a Return, shewing—1. The Government call for tenders for the supply of flour required at the different Institutions of the Province for the year 1908. 2. How many tenders were received. 3. The names and addresses of the persons or firms tendering and the price *per* barrel of each tender delivered at the various Institutions. 4. To whom the tender was awarded. 5. The estimated quantity required at each Institution. Presented to the Legislature, 28th February, 1908. Mr. *McCoig. Not printed.*

No. 58. . Return to an Order of the House of the twenty-fourth day of February, 1908, for a Return, shewing—1 What are the estimated quantities of each class of work done to January 31st, 1908, on the Government Railway by McRae, McNeil & Chandler under their contract with the Temiskaming and N. O. Railway Commission. 2. What sums, with date of payment, have been paid to McRae, McNeil & Co., or their assigns, for such work. 3. Has the Government taken the work out of the hands of the contractors. 4. What security, if any, has the Government for the due performance of the contract by the said firm. Presented to the Legislature, 2nd March, 1908. Mr. *Smith (Sault Ste. Marie.) Not printed.*

No. 59.. Return to an Order of the House of the second day of March, 1908, for a Return, shewing—1. How many cases have been tried by both Drainage Referees since their appointment. 2. What expense was there in connection therewith over and above the Referee's Salary. Presented to the Legislature, 9th March, 1908. Mr. *McMillan.* *Not printed.*

No. 60.. Return to an Order of the House of the seventh day of February, 1907, for a Return, shewing—1. The number of Division Courts in the Province. 2. How many Division Court Clerks have resigned between the 7th February, 1905, and 1st February, 1907. 3. How many Division Court Clerks have been removed from office between the said dates. The names of such persons and the cause of removal. 4. How many Division Court Bailiffs have resigned between the 7th day of February, 1905, and the 1st day of February, 1907. 5. How many Division Court Bailiffs have been removed from office between said dates. The names of such persons and the cause of removal. Presented to the Legislature, 9th March, 1908. Mr. *Munro.* *Not printed.*

No. 61 . Return to an Order of the House of the ninth day of March, 1908, for a Return shewing—1. What Municipal Corporations applied to the Hydro-Electric Power Commission, under 6 Edw. VII., Chap. 15, Sect. 6, for the transmission of electric power or energy, with the respective dates of such applications. 2. Did the Commission give to each of the said corporations a statement of the terms and conditions upon which such electric power or energy would be transmitted and supplied by the Commission, together with a form of contract to be entered into between each of the said corporations and the Commission. 3. Did the Commission furnish to each of the said corporations any estimate of the cost of constructing, erecting, installing, and maintaining of buildings, works, plant, machinery, poles, wires, etc., necessary for transmitting and supplying to each said corporation the amount of power applied for. 4. If so, give names of corporations and amount of each respective estimate. 5. Names of municipalities in each of which a By-law was submitted under Section 7 of said Act. 6. Names of municipalities where such By-law received the assent of the electors. 7. Has any contract been finally entered into between the Commission and any such municipal corporation for the supply of electric power or energy by the Commission to such municipality. 8. (*a*) The names of municipal corporations, if any, that made application to the Commission under 7 Edw. VII., Chap. 19, Section 12, with the respective dates of such applications. (*b*) The maximum price *per* H. P. at point of delivery to Commission, quoted by Commission to each of said municipalities. 9. Between what Municipal Councils, if any, and the Commission was any provisional contract entered into as provided for by said Section 12, prior to the submitting of the By-law to the Electors by any such Municipal Council. 10. Has any such contract been finally executed under the provisions of Section 13 of said last mentioned Act. 11. Was any estimate given by the Commission to the several municipal corporations in accordance with the requirements of said Section 12, shewing

(*a*) The total cost of constructing and maintaining a transmission line or lines. (*b*) The proportion or amount of said total cost to be charged to and paid for by each municipality. 12 If so, the names of such municipalities and the amounts of such total cost to be charged to each of the said municipalities. 13. Were such estimates and provisional contracts published with the By-law, in accordance with the provisions of said section 12. Presented to the Legislature, 9th March, 1908. Mr. *MacKay*. *Not printed.*

No. 62.. Report upon the Feeble-minded in Ontario, with Census. Presented to the Legislature, 2nd April, 1908. *Printed.*

No. 63.. Return to an Order of the House of the third day of March, 1908, for a Return, of copies of all correspondence relating to the removal of what is known as the Wisa Wasa dam in Chisholm township in the District of Nipissing. Presented to the Legislature, 10th March, 1908. Mr. *Smith* (*Sault Ste. Marie*). *Not printed.*

No. 64 . Statement of distribution of Statutes, Revised and Sessional, for the year 1907. Presented to the Legislature, 10th March, 1908. *Not printed.*

No. 65.. Return to an Order of the House of the twenty-fourth day of February, 1908, for a Return, shewing—1. Any estimate made, prior to the doing of the work, of the cost of clearing along the sides of the right of way of the Temiskaming and N. O. Railway, through the Temagami Forest Reserve. 2. If so, by whom was such estimate made and what the amount thereof. 3. What has been the actual cost of this work to date. 4. What is the estimate, if any, of the annual cost of maintaining the clearing in such a way as to make it useful in preventing the spread of fire. Presented to the Legislature, 10th March, 1908. Mr. *Smith* (*Sault Ste. Marie.*) *Not printed.*

No. 66.. Return to an Order of the House of the fifth day of March 1908, for a Return, shewing what timber located on the right of way of the Temiskaming and N. O. Railway has been put up for sale during the last two years, by tender or otherwise, by the Temiskaming and N. O. Railway Commission. Also, what prices have been obtained and the time and manner of payment; the names of the purchasers and copies of the tenders sent in by them, and also copies of all tenders received in the case of each berth sold. Presented to the Legislature, 17th March, 1908. Mr. *May*. *Not printed.*

No. 67.. Return to an Order of the House of the twenty-sixth day of February, 1908, for a Return, shewing the quantities of timber cut under license in the Township of Freeman by Arthur Hill, or any assignee, or assignees, of the license formerly held by the said Hill in the said Township; shewing in each year the person, or persons, who scaled logs on behalf of the Government on said limit, and in each year the quantity scaled by each of the said Government scalers, if more than one employed. Also, the names of the persons and quantities of logs in each year scaled by the

Culler or Cullers of the said Arthur Hill, or any assignee of the said license of the said Hill, also, shewing the assignee, or assignees, of the said Hill. Presented to the Legislature, 17th March, 1908. Mr. *Duff*. *Not printed.*

No. 68. . Return to an Order of the House of the thirteenth day of March, 1908, for a Return, shewing the amount expended on Colonization Roads in the District of Manitoulin, during the years 1902, 1903, 1904, 1905, 1906 and 1907, respectively. Presented to the Legislature, 18th March. 1908. Mr. *Smith* (*Sault Ste. Marie.*) *Not printed.*

No. 69. . Return to an Order of the House of the thirteenth day of March, 1908, for a Return, shewing the number of Bridges built, by the present Government, on the Spanish and Sauble Rivers, shewing where the Bridges cross the rivers and the appropriation made for each. Presented to the Legislature, 18th March, 1908. Mr. *Smith (Sault Ste. Marie). Not printed.*

No. 70. . Return to an Address to His Honour the Lieutenant-Governor, of the twenty-first day of February, 1908, praying that he will cause to be laid before this House, a Return, shewing the several Commissions, both special or permanent, issued by the present Government; the object or purpose of each Commission; the cost to the Province of each, up to the end of the year 1907, together with the names, in each case, of the several Commissioners. Presented to the Legislature, 23rd March, 1908. Mr. *May*. *Not printed*

No. 71. . Return to an Address to His Honour the Lieutenant-Governor, of the twenty-fourth day of February, 1908, praying that he will cause to be laid before this House, a Return, shewing the several Commissions of all descriptions issued during the years 1902, 1903 and 1904, the purpose of each Commission, the cost to the Province, together with the names of the several Commissioners in each case. Presented to the Legislature, 23rd March, 1908. Mr. *Preston (Lanark.) Not printed.*

No. 72. . Return to an Order of the House of the 21st day of February, 1908, for a Return, shewing: 1. The amount of losses caused by fire, in the Province, during the years 1900 to 1907, both inclusive—as reported to the Department of Insurance. 2. The amount of such losses reported to have been caused by incendiarism. 3. The amount of such losses caused by lightning. Presented to the Legislature, 24th March, 1908. Mr. *Munro*. *Not printed.*

No. 73 . A Return to an Order of the House of the twenty-sixth day of February, 1908, for a Return, shewing—1. How many civil servants have been dismissed since advent of present Government. 2. How many have resigned. 3. How many vacancies created by any other cause. 4. How many appointments to the Civil Service have been made during said period. 5. What was the number of civil servants in the employ of the Government on

December 31st, 1904. 6. What is the present number. Presented to the Legislature, 2nd April, 1908. Mr. *Ross. Not printed.*

No. 74. . A Return to an Address to His Honour the Lieutenant-Governor, of the fifth day of March, 1908, praying that he will cause to be laid before this House, a Return, of copies of all correspondence with the Government, or any member thereof, relating to the removal of Thomas Woodyatt from the office of Police Magistrate of the City of Brantford, also, copy of Report of Commissioner appointed to investigate certain charges preferred against said Woodyatt, and statement of aggregate cost of said Commission. Presented to the Legislature, 2nd April, 1908. Mr. *Preston (Brant.) Not printed.*

No. 75. . Return to an Order of the House of the eighteenth day of March, 1908, for a Return shewing: 1. How many persons have received permanent professional certificates under authority of either Sections 2, 3, or 4, of Chapter 52 of the Statutes of Ontario, passed in 1907. 2. Their names. 3. Under which Section they have qualified, and 4. How many persons have notified the Minister of Education, in writing, of their intention to comply with the provisions of either Section 6, or Section 7, of Chapter 52 of the Statutes of Ontario, passed in 1907. 5. What were the names and addresses of those who applied under each Section. Presented to the Legislature, 2nd April, 1908. Mr. *McElroy. Not printed*

No. 76. . Handbook of the Province. Presented to the Legislature, 2nd April, 1908. *Printed for distribution only.*

No. 77. . Return to an Address to His Honour the Lieutenant-Governor, of the ninth day of March, 1906, praying that he will cause to be laid before this House, a Return of copies of all papers and correspondence regarding the settlement of the Indian Claim of Northern Ontario, known as Treaty No. 9, together with a copy of the Treaty as finally agreed upon. Presented to the Legislature, 6th April, 1906. Mr. *Ross. Printed.*

No. 78. . Return to an Order of the House of the twenty-first day of February, 1908, for a Return, shewing a classified statement of annual payments of all kinds made by the Province to the University of Toronto and the School of Practical Science, for salaries, erection of buildings, maintenance, or for any other purpose whatever, for and during the period of the past six years. Presented to the Legislature, 10th April, 1908. Mr. *Hislop. Printed.*

REPORT

OF THE

Minister of Education

Province of Ontario

FOR THE YEAR

1907

PRINTED BY ORDER OF
THE LEGISLATIVE ASSEMBLY OF ONTARIO

TORONTO:
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REPORT

OF THE

MINISTER OF EDUCATION

FOR THE YEAR 1907

To the Honourable Sir Wm. Mortimer Clark, Kt., K.C.,
Lieutenant-Governor of the Province of Ontario.

May it Please Your Honour:

I beg to present to your Honour the Report of the Department of Education for the year 1907.

In order that the Report, with all the appendices, might appear in one volume, its publication has been delayed longer than usual.

Educational Policy.

The year 1907 marks another step in that process of re-construction through which the educational system is now passing. The latest modifications of the system are embodied in the Acts passed by the Legislature during the past two years and in the Regulations which have been adopted from time to time to amplify and carry out the intentions of these Acts. The objects steadily kept in view relate both to the betterment of the schools and to the welfare and to the training of the teachers.

Local Effort Encouraged.

In respect to the improvement of the schools, I have to report to your Honour the public satisfaction with the generosity of the Legislature in adopting unanimously the recommendations of the Government for increased grants to the rural schools. The Legislative vote of money to these schools was increased last year from $120,000 to $380,000, and this increased aid from Provincial funds, supplementing the sum raised by local taxation, has been received according to reports from many parts of the Province with evidence of strong appreciation. This policy, it is satisfactory to observe, has had a good effect in stimulating local effort and in encouraging the laudable desire of the people to respond to the larger requirements of the schools.

Schools in the New Districts.

It should be noted that the grant of $380,000 for rural schools is paid to the Sections in the Counties and that this sum is supplemented by a liberal grant to the urban and the rural schools in the new districts. These schools have also greatly benefited by the policy of increased grants and the educational facilities in those regions are improving to the manifest advantage

of the whole Province. It is in my opinion of great importance that a generous course should be taken toward the schools which are springing up in what is commonly called New Ontario. The exceptional conditions which exist in the mining and lumbering regions of the North call for exceptional treatment. It is of vital concern that the training of the children in rough and sparsely settled districts should be carefully looked after. Existence in pioneer settlements easily tends to neglect of education, although there are many gratifying proofs that in New Ontario parents exhibit self-sacrifice and public spirit to a remarkable degree and are ready to do their share in providing schools. But their power to raise the necessary sums for this purpose is limited, especially in the early years of settlement and it is the desire of the Department, as it is the policy of the State, to extend to the people in the North Country as well equipped a system of elementary instruction as exists in other parts of Ontario. With this end in view, one of the new training schools for teachers was assigned to North Bay, a town with good schools for practice purposes and in point of situation as accessible from all points as it is possible for one place to be in so vast a territory. The Normal School at North Bay will, it is hoped, attract in sufficient numbers pupils from the North who will be familiar with local conditions and who, in that respect, will be better qualified to supply the schools of the region. The instruction at North Bay should not be confined in its scope to that supplied by the Normal Schools in older Ontario. It may include courses to qualify candidates for certificates other than those of Normal standard. It may be that the immense distances to be traversed by the pupils and the cost of board entailed upon those who attend at North Bay will call for special treatment by the Department, and this consideration will be duly weighed at the proper time. The necessity of meeting the conditions which exist in New Ontario by measures not called for elsewhere has been before the Department during the past year. For this reason a second conference of the District Inspectors was held in Toronto towards the close of last year, and the intimate knowledge of the locality possessed by them was drawn upon. In my opinion regular consultation with those whose duties place them in close touch with the actual conditions is advisable and it is intended to continue the policy of dealing with the new problems that arise in the North by invoking the advice of the officers best qualified to understand them. It is proposed, in accordance with suggestions that have already been received, to give special encouragement to the consolidation of sections, the holding of teachers' institutes, and the establishment of night classes. I am also of the opinion that special treatment should be meted out to the Districts in the utilization of travelling libraries for school purposes, so as to place at the disposal of pupils, who cannot get access to public libraries, the use of good books, supplementing to an extent not necessary in the older regions the instruction given in schools.

Inducements to Improve.

The distribution of the grants to rural schools was placed in 1907 upon a basis designed to develop educational efficiency from several points of view. The grants are now paid on the professional qualifications of the teachers; on the equipment and the accommodations of the schools; on the salary of the teacher, to a maximum of $600; and fixed grants for schools in the less wealthy sections, up to a section assessment of $50,000. This basis has the advantage of offering a financial inducement to employ more experienced teachers, to supply modern equipment and healthier accommo-

dations, and it provides bonuses for the schools which stand in most need of support from the State. The same principle of inducement has been applied to the schools in the new districts and the bounty of the Legislature has thus been in operation all over the Province as an influence in the raising of teachers' salaries (still, in my opinion, far too low), and to bring schools into line with modern requirements. After this system of distribution has been in force long enough for the full effect to be observable, we may confidently look forward to a marked improvement in our school system. The time is now at hand when more attention should be devoted to the urban schools, especially those in the smaller municipalities, and the increased grant which has been given to them may also be judiciously employed to reward the employment of better teachers in proportion to their length of service.

Technical Education.

Nature having provided our Province with great resources which can be utilized for industrial purposes, it seems fitting that the training provided for our youths should qualify them to utilize for the common good and their own welfare the bountiful wealth of the country in forests, mines, water powers and soil. For some time I have thought that the attention of the Dominion authorities should be drawn to what I consider their duty toward technical education, and I am pleased now to note that the Dominion Government is considering the advisability of appointing a Commission to investigate and report upon this most important subject, as the conditions in each Province will need special and distinct treatment.

As Ontario produces over one-half the manufactured goods of Canada, her interest in the problem of technical education may be well considered, and her duty to do something in her own behalf properly estimated.

England, France, Germany and the United States are spending generous sums in this branch of training. The knowledge of what they have accomplished will, I trust, help us to deal more intelligently with the subject in our own Province. The natural resources of a country, the character of its people, the nature of its Government, have a distinct influence in determining its individuality and commercial efficiency.

Fifty years ago this Province was almost wholly an agricultural community. Now our manufacturing interests represent one-sixth of our entire population. Our agricultural processes and our manufacturing methods, our commercial, professional and social life have all changed during this period. These changed conditions also necessitate changes in our educational methods. Proper provision for technical training undoubtedly increases the duty now assumed by the people in educational matters. Should the Dominion Parliament recognize its obligations by a liberal grant for this purpose to the Provinces, it will be necessary for the Provincial authorities themselves to give effective aid. This is one of the most serious of the problems that confront us. It can best be met by united effort on the part of all who have to deal with it. The Department of Education, conscious of the enterprise of school boards in other respects, will receive, I feel sure, the co-operation of localities where technical instruction is specially necessary in the measures that are required to give better facilities for industrial training.

Meantime, the efforts devoted to the elementary work of Manual Training and Domestic Science are encouraging. There are now, as will be seen by the Report of the Inspector, 41 Manual Training centres. The value of

equipment in these centres is over $22,000. The number of boys receiving weekly instruction is approximately 10,000. There are 29 Household Science centres with equipment valued at $11,000, and more than 6,000 girls are receiving weekly instruction. All these schools are receiving annually liberal grants from the Government. Three centres for Manual Training and three for Household Science were opened during the past year, while there will be opened in 1908, 5 additional Manual Training centres. The report states that the progress of the work in Manual Training is shown not so much in the additional centres opened as in the extension of the work where it has been installed for some time.

Agricultural Courses.

The step taken last year to provide special courses in agriculture and horticulture in certain of the High Schools and Collegiate Institutes of the Province has had good results. The Department has been encouraged by the work accomplished to add two more to the six centres already established. These will be placed so as to serve portions of the Province not already reached by the existing centres. The whole question of agricultural education, however, is raised by the creation of these special departments in some of the secondary schools. There is a feeling, and it is not unreasonable, that our system of education tends strongly to draw away our young people from country life. It is becoming apparent that the course of instruction in rural elementary schools is imparted in a manner which increases the natural desire of pupils to seek the larger centres of population and enhances unduly the attraction of a professional or a commercial career. It is not well that in a rich agricultural Province like ours, the cultivation of the land, which offers healthy and prosperous openings for our youth, should be neglected. In stimulating an interest in rural life and occupations, the teacher can do much. Special training is needed to enable the teacher to effect this result. In connection with the revised course of instruction set up in the Normal Schools, it is proposed to offer inducements to teachers to take a short supplementary course at the Ontario Agricultural College at Guelph, whereby they will be fitted to awaken in boys and girls attending rural schools a deep interest in the work of the farm. In time a supply of teachers thus qualified will do much to correct the tendency to regard country life as inferior to existence in towns and cities. While this movement to provide qualified teachers for rural schools is in its initial stages, it will, I hope, develop until the special elementary instruction required is adequate to the purpose.

Schools for the Blind and Deaf.

The reports of the Principal of the Institution for the Blind, Brantford, and the Institution for the Deaf and Dumb, Belleville, are appended to my Report. They indicate that the Institutions are fulfilling the purpose for which they were established, although it is evident that in the near future additional accommodation will be required.

In the case of the Institution for the education of the blind, the Principal states that the practice of teaching the pupils to read by means of embossed letters will be discontinued and the Point System introduced. Those who have to do with similar schools in the United States recommend the Point System, and it is the intention to introduce into the imparting of instruction in the Institution the best ideas that have been tested elsewhere. The number of pupils last Session was 123.

The report of the Head of the Institution for the Deaf and Dumb shows that the attendance of pupils during the year has largely increased. It is now 228 compared with 214 during the previous year. Principal Coughlin reports the modification of the school curriculum so as to bring it as far as possible into harmony with the Public School course. As the desire in this Institution is to educate the deaf in the best modern methods, it may be that additional classes and a larger number of teachers will be required. In this Institution also more accommodation appears to be called for if the Institution is to be maintained at the highest standard of efficiency. The extension of oral teaching will demand more class room, and it is the advice of the most experienced instructors of deaf children that the Oral System should be employed wherever the faculties of the child seem to justify its use.

For the present, however, the expenditures in these Institutions at Belleville and Brantford are about the same.

R. A. PYNE,
Minister of Education.

SUMMARY OF STATISTICS.

I. Elementary Schools.

a. Public Schools.

Number of Public Schools in 1906		5,797
Increase for the year	4	
Number of enrolled pupils of all ages in the Public Schools during the year		398,232
Increase for the year	1,062	
Average daily attendance of pupils		234,076
Increase for the year	1,999	
Percentage of average attendance to total attendance		58.78
Increase for the year	.35	
Number of persons employed as teachers (exclusive of Kindergarten and Night School teachers) in the Public Schools: men, 1,748; women, 7,005; total		8,753
Decrease: men, 91; increase, women, 165; total increase	74	
Number of teachers who attended Normal School		4,425
Decrease for the year	17	
Number of teachers with a University degree		94
Increase for the year	17	
Average annual salary for male teachers		$547
Increase for the year	$33	
Average annual salary of female teachers		$369
Increase for the year	$21	
Average experience of male teachers		9.96 years
Average experience of female teachers		6.70 years
Amount expended for Public School houses (sites and buildings)		$681,250
Amount expended for teachers' salaries		$3,611,372
Amount expended for all other purposes		$1,473,703
Total amount expended on Public Schools		$5,766,325
Increase for the year	$242,223	
Cost per pupil (enrolled attendance)		$14.48
Increase for the year	$0.57	

b. Roman Catholic Separate Schools.

Number of Roman Catholic Separate Schools in 1906		443
Increase for the year	15	
Number of enrolled pupils of all ages		50,760
Increase for the year	1,436	
Average daily attendance of pupils		33,176
Increase for the year	1,146	
Percentage of average attendance to total attendance		65.35
Increase for the year	.41	
Number of teachers		1,009
Increase for the year	39	
Amount expended for School houses (sites and buildings)		$173,202
Amount expended for teachers' salaries		$269,176
Amount expended for all other purposes		$194,503

Total amount expended on R. C. Separate Schools		$636,881
Decrease for the year	$253	
Cost per pupil (enrolled attendance)		$12.54
Decrease for the year	$0.38	

c. Protestant Separate Schools.

Number of Protestant Separate Schools (included with Public Schools, *a*) in 1906		5
Number of enrolled pupils		310
Decrease for the year	10	
Average daily attendance of pupils		181
Decrease for the year	11	

d. Kindergartens.

Number of Kindergartens in 1906		139
Increase for the year	6	
Number of pupils enrolled		14,160
Increase for the year	1,680	
Average daily attendance of pupils		5,339
Increase for the year	384	
Number of teachers engaged		273
Increase for the year	13	

e. Night Schools.

Number of Night Schools in 1906-7		11
Increase for the year	1	
Number of pupils enrolled		898
Increase for the year	278	
Average daily attendance of pupils		372
Increase for the year	86	
Number of teachers engaged		18
Increase for the year	1	

II. Secondary Schools.*

a. High Schools.

Number of High Schools (including 42 Collegiate Institutes) in 1906		142
Increase for the year	2	
†Number of Teachers in High Schools		719
Increase for the year	30	
Number of pupils enrolled in High Schools		29,392
Increase for the year	731	
Average daily attendance of pupils		18,078
Increase for the year	511	
†Average annual salary, Principals		$1,303
Increase for the year	$33	

*The Curriculum of Secondary Schools includes all the subjects required for matriculation into the University.

†These statistics are based on Returns to the Department, dated January, 1907.

†Average annual salary, Assistants		$975
Increase for the year	$48	
†Average annual salary		$1,039
Increase for the year	$42	
†Highest salary paid		$3,500
Amount expended for High School teachers' salaries		$716,471
Amount expended for High School houses (sites and buildings)		$112,465
Amount expended for all other High School purposes		$200,358
Total amount expended on High Schools		$1,029,294
Increase for the year	$24,796	
Cost per pupil (enrolled attendance)		$35.01
Decrease for the year	$ 0.04	
Cost per pupil (average attendance)		$56.93
Decrease for the year	$ 0.25	

b. Continuation Classes.

Number of Continuation Classes, 1906-7 (included in Public and Separate Schools, I, *a* and *b*), practically doing High School work: Grade A, 90; Grade B, 41; Grade C, 106; Grade D, 201; total		438
Increase for the year: Grade A, 2; Grade C, 6; Grade D, 1. Total increase for the year	9	
Number of pupils in attendance		5,315
Increase for the year	91	

III. General.

Elementary and Secondary Schools.

Total population of the Province, 1906		*2,238,068
Pupils enrolled in Elementary and Secondary Schools		493,442
Increase for the year	5,187	
Average daily attendance		291,041
Increase for the year	4,126	
Percentage of total population enrolled		22.04

Average cost per pupil (enrolled attendance) in all schools:

	1902.	1904.	1905.	1906.
Sites and buildings	$0.97	$1.30	$2.18	$1.96
Teachers' salaries	7.63	8.44	8.88	9.32
All other expenses	2.80	3.32	3.62	3.78
For all purposes	$11.40	$13.06	$14.68	$15.06

Average cost per pupil (average attendance) in all schools:

	1902.	1904.	1905.	1906.
Sites and buildings	$1.70	$2.26	$3.70	$3.32
Teachers' salaries	13.34	14.69	15.11	15.80
All other expenses	4.89	5.79	6.16	6.42
For all purposes	$19.93	$22.74	$24.97	$25.54

†These statistics are based on Returns to the Department, dated January, 1907.
*Estimated.

COMPARATIVE SCHOOL STATISTICS, 1867-1906.

I. PUBLIC SCHOOLS (INCLUDING SEPARATE SCHOOLS).

These tables, 1, 2, 3, 4, and 5, for the purpose of comparison with previous years in which the R. C. Separate Schools were included with Public Schools, include R. C. Separate Schools. In the Statistical Tables, A, B, C, D, E (Appendix A), the Separate Schools are excluded.

1.—School Population—Attendance.

The School population of the Province, as ascertained by the assessors, is given in the third column of the following table:

Year.	School age.	School population.	Pupils enrolled under 5.	Pupils enrolled 5 to 21.	Pupils enrolled over 21.	Total number of enrolled pupils.	Average daily attendance.	Percentage of average attendance to total number attending school.
1867	5—16	447,726	.....	*a*380,511	*b*21,132	401,643	163,974	40.82
1872	5—16	495,756	.....	*a*433,664	*b*20,998	454,662	188,701	41.50
1877	5—16	494,804	1,430	488,553	877	490,860	217,184	44.25
1882	5—16	483,817	1,352	469,751	409	471,512	214,176	45.42
1887	5—21	611.212	1,569	491,242	401	493,212	245,152	49.71
1892	5—21	595,238	1,636	483,643	391	485,670	253,830	52.26
1897	5—21	590,055	1,385	480,120	272	482,777	273,544	56.66
1902	5—21	584,512	1,001	452,977	110	454,088	261,480	57.58
1905	5—21	578,032	814	445,601	79	446,494	264,107	59.15
1906	5—21	595,257	718	448,210	64	448,992	267,252	59.52

a 5—16. *b* Other ages than 5 to 16. Note.—Kindergarten and Night School pupils are not included in above table.

A considerable increase, viz., 2,498, in the enrolled attendance over the preceding year is shown in the above table. This number is, as the increase in the preceding year, more than made up, however, in the urban municipalities, as a further slight decline of 146 in the number of enrolled pupils in the rural schools of the Province is noticed.

The percentage of average daily attendance to enrolled attendance shows a slight increase, viz., .37.

The following table compares the attendance and gives the percentages from rural and from urban municipalities for several years:

Year.	Attendance in Rural Schools.	Attendance in Urban Schools.
1903	260,617 or 57.88% of total	189,661 or 42.12% of total
1904	253,133 or 56.93% of total	191,488 or 43.07% of total
1905	250,658 or 56.14% of total	195,836 or 43.86% of total
1906	247,929 or 55.22% of total	201,063 or 44.78% of total

2.—Classification of Pupils.

Year.	1st Reader—Parts I and II.	2nd Reader.	3rd Reader.	4th Reader.	5th or High School Reader.	Writing.	Arithmetic.	Drawing (Art).
1867	79,365	98,184	83,211	68,896	71,987	231,734	241,501	5,450
1872	160,828	100,245	96,481	67,440	29,668	322,688	327,218	57,582
1877	153,630	108,678	135,824	72,871	19,857	396,006	402,248	153,036
1882	165,834	106,229	117,352	71,740	10,357	398,401	419,557	176,432
1887	192,361	100,533	108,096	81,984	10,238	466,389	469,445	395,097
1892	187,947	96,074	99,345	88,934	13,370	465,516	470,813	435,239
1897	181,375	91,330	99,682	89,314	21,076	465,525	471,869	448,444
1902	176,503	85,732	90,630	83,738	17,485	445,316	449,573	434,030
1905	170,253	84,289	90,170	85,469	16,313	446,494	446,494	392,539
1906	172,464	84,231	90,013	86,469	15,815	448,992	448,992	386,023

Year.	Geography.	Music.	Physiology and Hygiene.	English History.	Canadian History.	Composition.	Grammar.
1867	272,173	47,618	.....	*61,787	.....	147,412	147,412
1872	327,139	110,083	.....	47,019	37,339	105,512	176,644
1877	375,951	168,942	.....	59,694	43,401	226,977	226,977
1882	280,517	158,694	33,926	*150,989	.....	209,184	209,184
1887	316,791	203,567	71,525	94,830	114,141	270,856	270,856
1892	334,947	220,941	171,594	106,505	147,451	294,331	294,331
1897	342,189	233,915	215,343	114,398	169,627	316,787	316,787
1902	318,755	268,356	194,459	106,282	163,672	296,172	296,172
1905	326,657	272,725	228,760	128,350	183,456	334,070	237,023
1906	330,547	281,900	236,185	139,172	191,023	355,413	232,121

*History.

The following table classifies the pupils in the various Readers in 1904, 1905 and 1906, as to Rural and Urban Schools.

	Year.	First Reader Part I.	First Reader Part II.	Second Reader	Third Reader	Fourth Reader	Fifth or High School Reader	Totals
Rural Schools	1904	60,784	36,941	47,930	50,297	47,289	9,892	253,133
"	1905	61,102	35,155	46,995	50,076	47,709	9,621	250,658
"	1906	60,307	34,160	46,846	49,487	48,138	8,991	247,929
Urban Schools (cities, towns, and incorporated villages)	1904	44,456	27,800	37,299	39,814	35,815	6,304	191,488
	1905	46,850	27,146	37,294	40,094	37,760	6,692	195,836
	1906	49,537	28,460	37,385	40,526	38,331	6,824	201,063

3.—Teachers' Certificates.

Year.	Public School teachers.	Male.	Female.	1st class.	2nd class.	3rd class.	Other certificates, including old County Board, etc.	Number of teachers who attended Normal School.
1867.....	4,890	2,849	2,041	1,899	2,454	386	151	666
1872.....	5,476	2,626	2,850	1,337	1,477	2,084	578	828
1877.....	6,468	3,020	3,448	250	1,304	3,926	988	1,084
1882.....	6,857	3,062	3,795	246	2,169	3,471	971	1,873
1887.....	7,594	2,718	4,876	252	2,553	3,865	924	2,434
1892.....	8,480	2,770	5,710	261	3,047	4,299	873	3,038
1897.....	9,128	2,784	6,344	343	3,386	4,465	924	3,643
1902.....	9,367	2,294	7,073	608	4,296	3,432	1,031	4,774
1905.....	9,649	1,950	7,699	661	4,018	3,248	1,722	4,620
1906.....	9,762	1,863	7,899	689	4,007	3,254	1,812	4,611

NOTE.—Kindergarten and Night School Teachers are not included in above table.

The number of men in the teaching profession is still decreasing. The percentage of men in 1905 was 20.21, while in 1906 it had declined to 19.08. The table below will show that the decline in the rural schools is slightly more than this as there was a small increase in 1906 in the number of males teaching in the urban municipalities.

An increase of 17 in the number of teachers with permanent certificates, 1st and 2nd class, is noticed although the percentage to the total number was slightly lower in 1906 than in the preceding year. Another considerable increase, viz., 90, in the number of "Other certificates," including temporary, took place.

The number of teachers and the class of the certificates, in the Public Schools alone, in each County and District of the Province will be found on pages 22 and 23 of this Report.

Ninety-four Public School teachers held University degrees in Arts, an increase of 17 over the preceding year 1905.

The following table classifies the teachers and certificates as to Rural and Urban schools for three years:—

	Public School Teachers.			Certificates.			
	Total.	Male.	Female.	1st Class.	2nd Class.	3rd Class.	Other Class.
Rural Schools, 1904.....	5,974	1,469	4,505	152	1,944	3,107	771
Rural Schools, 1905.....	6,007	1,354	4,653	146	1,752	2,969	1,140
Rural Schools, 1906.....	6,013	1,251	4,762	183	1,677	2,915	1,238
Urban (cities, towns and incorporated villages) 1904.	3,580	606	2,974	483	2,248	289	560
Urban, 1905.....	3,642	596	3,046	515	2,266	279	582
Urban, 1906.....	3,749	612	3,137	506	2,330	339	574

4.—Teachers' Salaries and Experience.

Teachers' Salaries.

Year.	Highest salary paid.	Average salary, male teacher, province.	Average salary, female teacher, province.	*Average salary, male teacher, rural schools.	*Average salary, female teacher, rural schools.	Average salary, male teacher, cities.	Average salary, female teacher, cities.	Average salary, male teacher, towns.	Average salary, female teacher, towns.	Average salary, male teacher, incorporated villages.	Average salary, female teacher, incorporated villages.
	$	$	$	$	$	$	$	$	$	$	$
1867	1,350	346	226	261	189	532	243	464	240	.....	.....
1872	1,000	360	228	305	213	628	245	507	216	.....	.....
1877	1,100	398	264	379	251	735	307	583	269	.....	.....
1882	1,100	415	269	385	248	742	331	576	273	.....	.....
1887	1,450	425	292	398	271	832	382	619	289	.....	.....
1892	1,500	421	297	383	269	894	402	648	298	.....	.....
1897	1,500	391	294	347	254	892	425	621	306	.....	.....
1902	1,600	436	313	372	271	935	479	667	317	.....	.....
1905	1,600	514	348	402	311	1,003	503	746	344	592	316
1906	1,700	547	369	425	325	1,039	533	761	382	619	342

*Incorporated villages included from 1867 to 1902, inclusive.

As will be seen in above table the average salaries have advanced considerably in all classes of schools and were higher in 1906 than at any period since Confederation. The increase in 1906 over 1905 was $34 for males and $21 for females in the whole Province, and $23 and $14 respectively in the rural schools. The figures for 1907 will no doubt show another increase, owing to the largely increased government grants and minimum salary clauses of the amended Schools Act.

In Table C, pages 22 and 23, the salaries of the Public School teachers of the various Counties and Districts are given separately, and summarized for the cities, towns, and villages.

Teachers' Experience.

The length of service or experience of the teachers engaged in the Public Schools has slightly increased as shown in Table C, pages 24 to 27, where the numbers who have taught from less than one year up to forty years and over are given for each year of that period.

5.—Receipts and Expenditures.

Year	Receipts.				Expenditures.					
	Legislative grants.	Municipal School grants and assessments.	Clergy reserve funds, balances and other sources.	Total receipts.	Teachers' salaries.	Sites and building school houses.	Libraries, maps, apparatus, prizes, etc.	Rent, repairs, fuel and other expenses.	Total expenditure.	Cost per pupil.
	$	$	$	$	$	$	$	$	$	$ c.
1867.	187,153	1,151,583	331,599	1,670,335	1,093,517	149,195	31,354	199,123	1,473,189	3 67
1872.	225,318	1,763,492	541,460	2,530,270	1,371,594	456,043	47,799	331,928	2,207,364	4 85
1877.	251,962	2,422,432	730,687	3,405,081	2,038,099	477,393	47,539	510,458	3,073,489	6 26
1882.	265,738	2,447,214	757,038	3,469,990	2,144,449	341,918	15,583	525,025	3,026,975	6 42
1887.	268,722	3,084,352	978,283	4,331,357	2,458,540	544,520	27,509	711,535	3,742,104	7 59
1892.	283,791	3,300,512	1,227,596	4,811,899	2,752,629	427,321	40,003	833,965	4,053,918	8 40
1897.	366,538	3,361,562	1,260,055	4,988,155	2,886,061	391,689	60,585	877,335	4,015,670	8 73
1902.	383,666	3,959,912	1,422,924	5,766,502	3,198,132	432,753	86,723	1,107,552	4,825,160	10 62
1905.	414,004	4,928,790	1,886,400	7,229,194	3,669,230	959,127	98,209	1,434,670	6,161,236	13 80
1906.	509,795	5,529,496	1,883,394	7,922,685	3,880,548	854,452	108,547	1,559,659	6,403,206	14 26

A large increase in the Government grant and a considerable increase in the municipal grants for 1906 over 1905 are shown in above table; also an increased expenditure, nearly the whole of it being spent on teachers' salaries. The expenditure per pupil of enrolled attendance increased from $13.80 to $14.26, and from $23.32 to $23.96 per pupil of average attendance,

The following table shows the increases since 1902 :—

Average cost per pupil (enrolled attendance).

	1902.	1904.	1905.	1906.
Sites and buildings	$0.95	$1.30	$2.15	$1.90
Teachers' salaries	7.04	7.81	8.22	8 64
All other expenses	2.63	3.16	3 43	3.72
For all purposes	$10.62	$12.27	$13.80	$14.26

Average cost per pupil (average attendance).

	1902.	1904.	1905.	1906.
Sites and buildings	$ 1.65	$ 2.25	$ 3.63	$ 3.20
Teachers' salaries	12.23	13.51	13.89	14.52
All other expenses	4.57	5.47	5.80	6.24
For all purposes	$18.45	$21.23	$23.32	$23.96

The cost per pupil (enrolled attendance) for 1906 in the Public Schools alone will be found on pages 36 and 37 of this Report, and for the R. C. Separate Schools on pages 40 and 41. The expenditure will there be shown as to rural schools, cities, towns, and villages, separately.

II. ROMAN CATHOLIC SEPARATE SCHOOLS.

Year.	Schools—Teachers—Pupils.			Number of pupils in the various branches of instruction.									
	Schools open.	Teachers.	Pupils.	Writing.	Arithmetic.	Geography.	Composition.	Grammar.	Drawing (Art).	Physiology and Hygiene.	English History.	Canadian History.
1867	161	210	18,924	10,749	10,559	8,666	.....	5,688	.....	.....	*2,571	.....
1872	171	254	21,406	13,699	12,189	8,011	7,908	7,908	.....	.....	*3.548	.....
1877	185	334	24,952	17,932	17,961	13,154	11,174	11,174	.....	.....	*9,812	.....
1882	190	390	26,148	21,052	21,524	13,900	11,695	11,695	7,548	2,033	*10,124	.....
1887	229	491	30,373	27,824	28,501	19,608	18,678	18,678	21,818	8,578	5,076	7,931
1892	312	662	37,466	35,565	25,936	26,299	22,755	22,755	32,682	11,056	6,713	11,483
1897	340	752	41,620	39,724	40,165	27,471	26,071	26,071	36,462	18,127	6,828	13,134
1902	391	870	45,964	45,964	45,964	29,788	27,409	27,409	41,952	14,687	7,544	15,035
1905	428	970	49,324	49,324	49,324	34,205	32,201	25,526	39,501	23,909	10,732	18,593
1906	443	1,009	50,760	50,760	50,760	33,203	34,607	25,667	35,355	20,983	12,141	20,258

*History.

Year.	Receipts.				Expenditure.					
	Legislative grants.	Municipal school grants and assessments.	Balances, subscribed and other sources.	Total receipts.	Teachers' salaries.	Sites and building school houses.	Libraries, maps, apparatus, prizes, etc.	All other purposes.	Total expenditure.	Cost per pupil.
	$	$	$	$	$	$	$	$	$	$
1867..	9,993	26,781	11,854	48,628	34,830	.....	.....	†7,889	42,719	2.26
1872..	12,327	41,134	15,349	68,810	45,824	.....	.....	†15,993	61,817	2.88
1877..	13,607	72,177	34,482	120,266	70,201	24,510	2,811	17,284	114,806	4.60
1882..	14,382	97,252	55,105	166,739	84,095	36,860	1,303	32,082	154,340	5.13
1887..	16,808	147,639	65,401	229,848	112,293	48,937	3,624	46,369	211,223	6.95
1892..	21,043	206,698	98,293	326,034	149,707	65,874	2,922	71,335	289,838	7.74
1897..	26,675	224,617	84,032	335,324	168,800	41,233	5,786	86,350	302,169	7.26
1902..	30,472	293,348	161,683	485,503	210,199	100,911	6,158	118,173	435,441	9.47
1905..	33,541	379,117	281,333	693,991	246,906	243,366	13,857	133,005	637,134	12.92
1906..	39,478	412,532	247,351	699,361	269,176	173,202	10,190	184,313	636,881	12.54

† Including all expenditure except Teachers' salaries.

An increase in the number of R. C. Separate Schools, and a slight decrease in the expenditure in 1906 in comparison with 1905 are noticed in above table. The expenditure per pupil of enrolled attendance decreased from $12.92 to $12.54. Detailed statistics in reference to these schools will be found on pages 38 to 45 of this Report.

III. PROTESTANT SEPARATE SCHOOLS.

The following is a complete list of the Protestant Separate Schools of the Province:—No. 9, Cambridge; No. 6, Plantagenet North; No. 1, North Tilbury, L'Orignal, and Penetanguishene.

They were attended by 310 pupils. The whole amount expended for their maintenance was $4,506.36. Three teachers held a Second Class, four a Third Class, and one a Temporary Certificate.

Complete statistics for these schools will be found on page 70.

IV. COLLEGIATE INSTITUTES AND HIGH SCHOOLS.

The following statistics respecting Collegiate Institutes and High Schools will be found suggestive :

I.—Receipts, Expenditure, Attendance, etc.

Year.	Schools open.	Teachers.	Receipts.			Expenditure.			Pupils.	Percentage of average attendance to total attendance.	Cost per pupil.
			Amount of fees.	Legislative grant.	Total receipts.	Paid for teachers' salaries.	Paid for sites and building school houses.	Total expenditure.			
			$	$	$	$	$	$			$
1867.....	103	159	15,605	54,562	139,579	94,820	*19,190	124,181	5,696	55	21 80
1872.....	104	239	20,270	79,543	223,269	141,812	*31,360	210,005	7,968	56	26 36
1877.....	104	280	20,753	78,762	357,521	211,607	*51,417	343,710	9,229	56	37 24
1882.....	104	332	29,270	84,304	373,150	253,864	*19,361	343,720	12,348	53	27 56
1887.....	112	398	56,198	91,977	529,323	327,452	*73,061	495,612	17,459	59	28 38
1892.....	128	522	97,273	100,000	793,812	472,029	*91,108	696,114	22,837	60	30 48
1897.....	130	579	110,859	101,250	767,487	532,837	*46,627	715,976	24,390	61	29 35
1902.....	134	593	105,801	112,650	832,853	547,402	44,246	769,680	24,472	58.97	31 45
1905.....	140	689	128,886	121,639	1,096,266	666,547	103,515	1,004,498	28,661	61.29	35 05
1906.....	142	719	132,067	127,843	1,209,782	716,471	112,465	1,029,294	29,392	61.50	35 02

* Expenses for repairs, etc., included.

The expenditure per pupil in the High Schools was practically the same in 1906 as in the preceding year, as shown in the following tables. The attendance is still on the increase as noticed above, and when that at the Continuation Classes is considered, the increase in the number taking up secondary education is quite marked. 7.03 per cent. of the enrolled attendance of the Province is so engaged and about 20 per cent. of those who reach the Fourth Reader extend their course to the secondary schools.

Average cost per pupil (enrolled attendance) per year :

	1902	1904	1905	1906
	$	$	$	$
Sites and buildings.....	1 81	1 82	3 61	3 83
Teachers' salaries.....	22 37	22 40	23 26	24 37
All other expenses.....	7 27	7 43	8 18	6 82
For all purposes.....	31 45	31 65	35 05	35 02

Average cost per pupil (average attendance) per year:

	1902	1904	1905	1906
	$	$	$	$
Sites and buildings	3 07	3 02	5 89	6 22
Teachers' salaries	37 93	37 10	37 94	39 63
All other purposes	12 34	12 30	13 35	11 08
For all purposes	53 34	52 42	57 18	56 93

2.—Classification of Pupils, etc.

Year.	English.						Mathematics.				Science.		
	English Grammar.	English Composition.	Poetical Literature.	Geography.	Canadian History.	British History.	Arithmetic and Mensuration.	Algebra.	Geometry.	Trigonometry.	Physics.	Chemistry.	Botany.
1867	5,467	4,091	.....	5,264	.....	†4,634	5,526	2,841	1,847	141	1,876	840	.....
1872	7,884	7,278	.....	7,715	.....	†7,513	7,834	6,033	2,592	174	1,921	1,151	.....
1877	8,819	8,772	.....	9,158	.....	†9,106	9,227	8,678	8,113	359	2,168	2,547	.....
1882	12,275	12,189	.....	12,106	.....	†12,220	12,261	11,742	11,148	397	2,880	2,522	.....
1887	17,086	17,171	16,649	16,962	.....	†17,010	16,939	16,904	14,839	1,017	5,265	3,411	4,640
1892	22,530	22,525	22,468	22,118	.....	†22,328	21,869	22,229	17,791	1,154	6,601	3,710	6,189
1897	19,591	24,195	24,176	13,747	18,318	20,304	19,798	24,105	16,788	1,652	11,002	5,489	12,892
1902	21,576	24,241	23,768	14,500	14,768	16,817	21,594	22,953	16,881	1,662	12,758	5,860	9,051
1905	25,399	27,667	*27,775	22,003	22,566	23,975	25,455	23,847	22,123	1,913	21,901	12,413	13,569
1906	25,850	28,621	*28,614	22,379	22,981	24,321	26,289	26,330	21,672	1,944	21,867	13,599	14,507

* English Literature. † History.

2—Classification of Pupils, etc.—*Continued.*

Year	Languages.				Drawing (Art).	Bookkeeping.	Left for mercantile life.	Left for agriculture.	Who joined a learned profession.	Who became school teachers.	Number of schools charging fees.	Number of free schools.
	Latin.	Greek.	French.	German.								
1867	5,171	802	2,164	.....	676	1,283	.....	.....	.....	.....	67	36
1872	3,860	900	2,828	341	2,176	3,127	486	300	213	.....	28	76
1877	4,955	871	3,091	442	2,755	3,621	555	328	564	.....	35	69
1882	4,591	815	5,363	962	3,441	5,642	881	646	751	.....	37	67
1887	5,409	997	6,180	1,350	14,295	14,064	1,141	882	791	.....	58	54
1892	9,006	1,070	10,398	2,796	16,980	16,700	1,111	1,006	398	1,527	77	51
1897	16,873	1,421	13,761	5,169	12,252	11,647	1,368	1,153	409	2,056	87	43
1902	18,884	631	13,595	3,280	10,721	11,334	1,573	743	705	1,238	82	52
1905	19,409	603	16,430	3,366	13,641	13,152	1,949	859	861	1,305	83	57
1906	19,762	678	16,579	3,593	13,664	12,689	2,229	779	928	1,520	83	59

The occupations of the parents of all pupils enrolled in the High Schools and Collegiate Institutes in 1906 are shown below, as well as the percentage of the whole in each class of the Province deriving advantages from those secondary schools:

Classes.	No. in each class.	Percentage.
Agricultural	8,602	29.26
Commercial	7,853	26.72
Mechanical	5,813	19.78
Professional	2,831	9.63
Labouring occupations	2,492	8.48
Other callings	1,801	6.13

The statistics in detail of the various Collegiate Institutes and High Schools in the Province will be found on pages 46 to 69 of this Report.

V. DEPARTMENTAL EXAMINATIONS, ETC.

1.—Table showing the Number of Teachers in Training at County Model Schools, Normal College, Provincial Normal Schools, 1877-1906.

Year.	County Model Schools.			Normal College			Normal and Model Schools, etc.					
	No. of Schools.	No. of teachers in training.	No. that passed final examination.	No. of teachers.	Number of students admitted.	Receipt from fees of Normal College.	No. of Normal School teachers.	No. of Normal School students admitted.	No. of Model School and Kindergarten teachers.	No. of Model School and Kindergarten pupils.	Receipt from fees of Normal Schools, Models Schools and Kindergarten pupils.	Expenditure, Normal and Model Schools.
						$ c.					$ c.	$ c.
1877.....	50	1,146	1,124	....	....	.....	13	257	8	643	7,909 22	25,780 88
1882.....	46	882	837	....	....	.....	16	260	15	799	13,783 50	44,888 02
1887.....	55	1,491	1,376	....	....	.....	13	441	18	763	16,427 00	40,188 66
1892.....	59	1,283	1,225	10	96	1,630 00	12	428	22	842	19,016 00	45,724 12
1897.....	60	1,645	1,384	12	180	4,374 00	13	407	23	832	18,797 59	46,390 91
1902.....	54	1,171	1,138	15	132	2,405 00	16	619	31	958	20,735 00	56,672 98
1905.....	55	1,209	1,186	16	170	2,965 00	*27	306	36	1,023	21,794 00	67,091 63
1906.....	56	1,750	1,693	17	191	3,505 00	*27	345	36	990	22,616 00	69,259 57

*Including those engaged in both a Normal and a Model School.

2—Entrance Examinations, 1877-1907.

Year.	No of Candidates examined.	No. of Candidates who passed.
1877	7,383	3,836
1882	9,607	4,371
1887	16,248	9,364
1892	16,409	8,427
1897	16,384	10,502
1902	18,087	13,300
1906	21,710	13,819
1907	22,144	15,430

3.—Non-professional Teachers and Matriculation Examinations, 1907.

	District Certificate.	Junior Teachers.	Part I, Senior Teachers.	Part II, Senior Teachers.	Jr. Matriculation and Scholarship.	Commercial Specialist.	Art Specialist.
No. candidates	292	3,110	561	396	2,957	7	†4
No. who passed	153	1,467	339	277	*	5	3
No. of appeals	1	248	33	23	39	1	.....
No. sustained	.....	51	13	12	11	1	.....
Total passed	153	1,518	352	289	.....	6	3
Per cent. passed	52	49	61	74	.....	85	75

*Owing to changes in matriculation the number who passed is not known.
†First Examination held in 1906.

Total number of candidates for teachers' examinations 4,360
Total number passed.....2,321
Number passed as result of Teachers' Report..... 336
Number of Junior Teachers candidates who took Latin 1,780
Number of Junior Teachers candidates who passed in Latin 1,365
Number who would have failed but for Latin..... 341

Honour Matriculation.

Number of candidates for whole or part, who were not also candidates for Senior Teachers' examination 138

Number of candidates for Scholarship..... 131

VI. TEACHERS' INSTITUTES,

This table presents the work of the Teachers' Institutes for thirty years:

Year.	No. of Teachers' Institutes.	No. of Members.	No. of Teachers in the Province.	Receipts.				Expenditure.	
				Amount received from government grants.	Amount received from municipal grants.	Amount received from members' fees.	Total amount received	Amount paid for libraries.	Total amount paid.
				$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
1877....	42	1,181	6,468	1,412 50	100 00	299 75	2,769 41	.....	1,127 63
1882....	62	4,395	6,857	2,900 00	300 00	1,088 84	9,394 28	453 02	5,355 33
1887....	66	6,781	7,594	1,800 00	1,879 45	730 66	10,405 95	1,234 08	4,975 50
1892....	69	8,142	8,480	1,950 00	2,105 00	875 76	12,043 54	1,472 41	6,127 46
1897....	73	7,627	9,128	2,425 00	2,017 45	901 15	12,446 20	1,479 88	6,598 84
1902....	77	8,515	9,367	2,515 00	1,877 50	1,171 80	13,171 26	1,437 18	7,188 45
1905....	80	8,958	9,649	2,525 00	1,937 00	1,230 65	13,604 57	1,054 01	7,615 19
1906 ...	82	9,230	9,762	3,000 00	1,877 00	1,518 50	13,799 15	1,054 84	7,673 38

See pages 76 to 79 for details for 1906.

DR. J. A. McLELLAN.

Late Principal, Ontario Normal College.

On 11th August, 1907, there died at the family residence, 83 Macpherson Avenue, Toronto, one of Ontario's most prominent and brilliant educationists, James Alexander McLellan, M.A., LL.D., whose last official duties were connected with the Principalship of the Ontario Normal College, Hamilton.

The late Dr. McLellan was born in Shubenacadie, Nova Scotia, in 1832, He was of English, Scotch and Irish descent, while some of his ancestors were in the Imperial Army, and were United Empire Loyalists. He taught his first school when but fifteen years of age. In 1857 he attended the Provincial Normal School at Toronto. The following year he was appointed to the teaching staff of the Central School, St. Mary's, and in 1860 to the Grammar School in the same place at its opening. Later he entered the University of Toronto, and graduated in 1862, capturing the medal in Mathematics and Metaphysics. He obtained his M.A. in 1863, LL.B. in 1872, and LL.D. in 1873 from his Alma Mater.

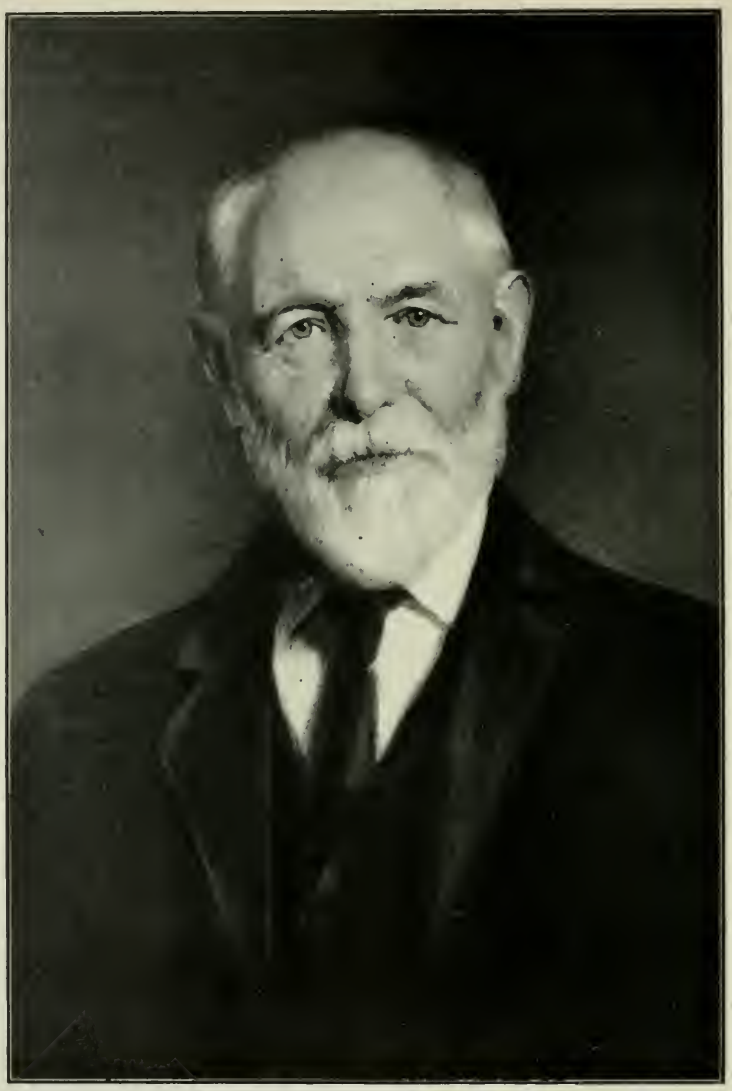
He became Principal of the Yarmouth Seminary on its opening in 1864. While occupying that position he gave an enthusiastic support to the cause of Confederation, and received the special thanks of the then Prime Minister, Sir John A. Macdonald. In 1869 he again returned to Toronto to become Mathematical Master of Upper Canada College. He was appointed High School Inspector for Ontario in 1871, and also a member of the first Central Committee on Education; Director of Normal Schools in 1875; Director of Teachers' Institutes in 1885; and Principal of the School of Pedagogy (later the Ontario Normal College), for the professional training of First Class Public School Teachers and High School Assistants, in 1890, from which position he retired in 1906, owing to declining health.

In 1897, Dr. McLellan, who besides being Principal of the Normal College was Professor of Psychology and History of Education therein, assumed charge of the fine new building which had been erected in Hamilton for the College. He ever realized that to have a high standard of education we must have well qualified teachers, and that the institutions in which these teachers were to receive their training, must be made thoroughly efficient. He was well known not only in Ontario and the Maritime Provinces, but also in the United States as a forcible and inspiring lecturer on educational themes.

In 1895 Dr. McLellan was elected a director of the Dominion Educational Association, and he has also been President of the Ontario Teachers' Association. Among his literary productions are several works on Arithmetic and Algebra; one on Applied Psychology (1889); one on applications to methods of teaching Arithmetic (1895); one in collaboration with A. F. Ames, on the Psychology of Arithmetic (1897). At the time of his death he had nearly completed "Aims and Methods in the study of English Literature."

In religion he was a Methodist and had been a local preacher in that body. He was a candidate in the Liberal interests at the Dominion general elections in 1872, against the late John Crawford, Q.C. He married in 1851, Harriet, daughter of the late Wm. Tounsley, an early settler of Toronto; he is survived by the widow, five daughters and three sons. The daughters are: Mrs. J. W. Rogers, Alberta; Mrs. Randolph, Seattle; Mrs. W. Scott, Toronto; Mrs. E. Richards, Hamilton; and Mrs. Richard Baker, Toronto. The sons are Messrs. James A., William, and C. K. McLellan, all of Toronto.

The Late Dr. J. A. McLellan.



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THE LATE SAMUEL McALLISTER.

LATE PRINCIPAL, RYERSON SCHOOL, TORONTO.

The late Samuel McAllister, who died 1st July, 1907, aged 71 years, taught in the schools of Toronto for about forty-seven years. He first taught in a private school, then as assistant master in Louisa Street School. In 1864 he became Principal of Givens Street School, afterwards of John Street School, and in 1877 he was selected as the first Principal of Ryerson School, which position he held until his retirement in December, 1906, when he was superannuated by the Board of Education of Toronto.

Many noted professional and business men received their early training under Mr. McAllister. He will be well and affectionately remembered by thousands who received his tuition. Mr. McAllister had always been an active and prominent member of the Ontario Educational Association, and had held the offices of President and Treasurer.

APPENDICES.

APPENDIX A.—*STATISTICAL TABLES.*

THE PUBLIC SCHOOLS.

I. Table A.—School Population, Attendance, etc.

Counties, (including incorporated villages, but not cities or towns) etc.	School population between 5 and 21 years of age.	Pupils under 5 years of age.	Pupils between 5 and 21 years of age.	Pupils over 21 years of age.	Total number of pupils attending school.	Boys.	Girls.	Average daily attendance of pupils.	Percentage of average to total attendance.
1 Brant	3,656	27	2,974	....	3,001	1,588	1,413	1,691	56
2 Bruce	11,637	13	8,563	1	8,577	4,462	4,115	5,065	59
3 Carleton	8,404	32	6,637	1	6,670	3,517	3,153	3,555	53
4 Dufferin	4,666	16	4,118	....	4,134	2,201	1,933	1,847	44
5 Dundas	5,118	11	4,094	1	4,106	2,173	1,933	2,423	59
6 Durham	4,731	6	4,202	1	4,209	2,105	2,104	2,190	52
7 Elgin	6,681	8	5,446	....	5,454	2,838	2,616	3,212	59
8 Essex	9,971	5	6,029	2	6,036	3,078	2,958	3,144	52
9 Frontenac	6,482	23	5,278	2	5,303	2,791	2,512	2,473	46
10 Glengarry	4,556	8	3,790	1	3,799	1,972	1,827	1,759	46
11 Grey	13,971	57	11,542	3	11,602	6,022	5,580	6,041	52
12 Haldimand	4,615	11	3,391	....	3,402	1,765	1,637	2,177	64
13 Haliburton	1,896	29	1,651	1	1,681	874	807	690	41
14 Halton	4,174	2	3,102	....	3,104	1,648	1,456	1,748	56
15 Hastings	10,556	11	8,391	1	8,403	4,296	4,107	4,445	53
16 Huron	13,342	4	8,957	3	8,964	4,562	4,402	5,627	63
17 Kent	9,144	14	7,455	1	7,470	3,870	3,600	3,986	53
18 Lambton	11,265	11	8,288	....	8,299	4,302	3,997	5,048	61
19 Lanark	5,584	6	3,989	....	3,995	2,035	1,960	2,400	60
20 Leeds and Grenville	10,608	32	8,591	2	8,625	4,408	4,217	4,605	53
21 Lennox and Addington	4,061	19	3,421	....	3,440	1,776	1,664	1,746	50
22 Lincoln	4,895	9	3,566	1	3,576	1,905	1,671	1,877	52
23 Middlesex	10,939	4	8,260	1	8,265	4,324	3,941	4,922	59
24 Norfolk	5,916	34	5,027	2	5,063	2,629	2,434	2,688	53
25 Northumberland	6,275	12	4,803	....	4,815	2,545	2,270	2,712	56
26 Ontario	7,653	9	6,403	2	6,414	3,279	3,135	3,528	55
27 Oxford	8,008	....	6,361	....	6,361	3,341	3,020	3,763	59
28 Peel	4,703	....	3,545	....	3,545	1,906	1,639	1,868	53
29 Perth	8,400	16	5,707	....	5,723	3,015	2,708	3,494	61
30 Peterborough	6,231	12	4,742	1	4,755	2,460	2,295	2,567	54
31 Prescott and Russell	13,221	42	4,886	3	4,931	2,590	2,341	2,477	50
32 Prince Edward	2,917	8	2,679	3	2,690	1,422	1,268	1,328	49
33 Renfrew	15,269	30	7,443	6	7,479	3,936	3,543	3,399	45
34 Simcoe	14,941	24	12,622	....	12,646	6,491	6,155	6,531	52
35 Stormont	4,460	7	3,461	2	3,473	1,800	1,673	1,760	51
36 Victoria	6,575	9	5,112	....	5,121	2,634	2,487	2,761	54
37 Waterloo	7,395	6	5,213	....	5,219	2,851	2,368	3,336	64
38 Welland	5,672	21	4,715	....	4,736	2,493	2,243	2,486	52
39 Wellington	10,445	13	7,198	3	7,214	3,838	3,376	4,337	60
40 Wentworth	6,047	5	4,675	....	4,680	2,433	2,247	2,596	55
41 York	15,492	4	11,948	....	11,952	6,313	5,639	6,259	52
42 Algoma and Manitoulin	6,844	36	5,269	5	5,310	2,699	2,611	2,423	46
43 Muskoka	4,442	20	3,573	....	3,593	1,943	1,650	1,547	43
44 Nipissing, etc	4,400	24	3,521	....	3,545	1,745	1,800	1,736	49
45 Parry Sound	6,316	15	5,055	1	5,071	2,532	2,539	2,209	43
46 Rainy River and Thunder Bay	2,398	....	1,949	....	1,949	978	971	851	44
47 Moose Fort	100	....	22	....	22	15	7	14	64
Totals	345,072	705	257,667	50	258,422	134,400	124,022	139,341	53.92
Totals, Incorporated Villages	34,620	30	26,061	8	26,099	13,042	13,057	16,706	64.01
Totals, Rural Schools	310,452	675	231,606	42	232,323	121,358	110,965	122,635	52.78

THE PUBLIC SCHOOLS.—*Continued*

I. Table A.—School Population, Attendance, etc.—*Continued.*

Cities.	School population between 5 and 21 years of age.	Pupils under 5 years of age.	Pupils between 5 and 21 years of age.	Pupils over 21 years of age.	Total number of pupils attending school.	Boys.	Girls.	Average daily attendance of pupils.	Percentage of average to total attendance.
1 Belleville	2,161	....	1,325	....	1,325	685	640	892	67
2 Brantford	3,890	....	2,716	....	2,716	1,364	1,352	1,916	70
3 Chatham	2,560	....	1,549	....	1,549	745	804	1,008	65
4 Guelph	3,260	....	1,700	....	1,700	838	862	1,230	72
5 Hamilton	25,923	....	8,404	1	8,405	4,314	4,091	6,089	72
6 Kingston	5,674	....	2,410	....	2,410	1,188	1,222	1,793	74
7 London	9,065	....	6,003	....	6,003	3,063	2,940	4,256	71
8 Niagara Falls	2,044	....	1,284	....	1,284	630	654	831	65
9 Ottawa	18,376	....	5,559	....	5,559	2,790	2,769	3,854	69
10 Peterborough	2,279	....	2,014	....	2,014	1,016	998	1,430	71
11 St. Catharines	2,470	....	1,461	....	1,461	714	747	1,011	69
12 St. Thomas	4,269	....	2,066	....	2,066	1,015	1,051	1,471	71
13 Stratford	2,714	....	1,703	....	1,703	888	815	1,257	73
14 Toronto	53,748	....	32,050	3	32,053	16,178	15,875	22,233	69
15 Windsor	4,212	....	1,757	....	1,757	929	828	1,295	73
16 Woodstock	1,972	....	1,490	....	1,490	717	773	1,047	70
Totals	144,617	....	73,491	4	73,495	37,074	36,421	51,613	70.22
Towns.									
1 Alexandria	731	....	65	....	65	34	31	41	63
2 Alliston	460	....	373	2	375	179	196	239	64
3 Almonte	742	....	402	....	402	207	195	265	66
4 Amherstburg	620	....	314	....	314	167	147	204	65
5 Arnprior	1,270	....	592	....	592	269	323	398	67
6 Aurora	480	....	316	....	316	155	161	222	70
7 Aylmer	514	....	387	....	387	183	204	262	67
8 Barrie	1,595	....	1,181	....	1,181	567	614	698	59
9 Berlin	2,834	....	1,617	....	1,617	813	804	1,233	76
10 Blenheim	473	....	421	....	421	212	209	290	69
11 Blind River	519	2	532	.. .	534	293	241	206	38
12 Bonfield	*175	....	45	....	45	24	21	24	53
13 Bothwell	231	....	220	1	221	110	111	142	64
14 Bowmanville	636	....	478	....	478	230	248	296	62
15 Bracebridge	1,200	....	777	2	779	348	431	468	60
16 Brampton	774	....	513	....	513	263	250	339	66
17 Brockville	2,323	....	1,190	....	1,190	578	612	866	72
18 Bruce Mines	231	....	253	....	253	111	142	148	58
†19 Cache Bay	250	....	192	....	192	89	103	102	53
20 Campbellford	600	....	576	....	576	282	294	404	70
21 Carleton Place	1,126	....	818	....	818	396	422	604	74
22 Chesley	439	....	339	....	339	173	166	261	77
23 Clinton	527	3	451	....	454	249	205	325	72
24 Cobourg	931	....	550	....	550	287	263	342	62
25 Collingwood	1,865	....	1,295	....	1,295	645	650	907	70
26 Copper Cliff	650	....	383	....	383	197	186	206	54
27 Cornwall	2,031	....	655	....	655	352	303	471	72
28 Deseronto	771	....	691	1	692	358	334	412	60
29 Dresden	450	....	413	....	413	195	218	276	67
30 Dundas	1,037	....	571	....	571	294	277	385	67
31 Dunnville	640	....	522	....	522	264	258	314	60
32 Durham	460	....	423	....	423	196	227	293	69
33 East Toronto	1,213	....	907	....	907	449	458	546	60

* Estimated. † Statistics of preceding year.

THE PUBLIC SCHOOLS.—*Continued.*

1. Table A.—School Population, Attendance, etc.—*Continued.*

	Towns.	School population between 5 and 21 years of age.	Pupils under 5 years of age.	Pupils between 5 and 21 years of age.	Pupils over 21 years of age.	Total number of pupils attending school.	Boys.	Girls.	Average daily attendance of pupils.	Percentage of average to total attendance.
34	Essex	391	....	323	....	323	164	159	207	64
35	Forest	402	....	304	....	304	144	160	220	72
36	Fort Frances	241	....	213	....	213	70	143	93	44
37	Fort William	1,479	....	960	....	960	486	474	469	49
38	Galt	1,936	....	1,301	....	1,301	651	650	953	73
39	Gananoque	1,103	....	776	1	777	392	385	514	66
40	Goderich	1,034	....	576	....	576	286	290	410	71
41	Gore Bay	*435	....	349	....	349	153	196	174	50
42	Gravenhurst	727	....	632	....	632	344	288	386	61
43	Haileybury	400	....	240	....	240	114	126	71	30
44	Hanover	628	....	430	....	430	193	237	310	72
45	Harriston	384	....	361	....	361	159	202	211	58
46	Hawkesbury	1,535	....	173	....	173	95	78	101	58
47	Hespeler	812	....	460	....	460	258	202	315	68
48	Huntsville	710	....	622	....	622	295	327	372	60
49	Ingersoll	1,131	....	783	....	783	392	391	514	66
50	Kincardine	642	....	386	....	386	178	208	270	70
51	Kingsville	488	5	381	....	386	185	201	264	68
52	Kenora	1,850	....	954	....	954	470	484	587	61
53	Leamington	708	....	491	....	491	266	225	325	66
54	Lindsay	1,962	....	1,037	....	1,037	509	528	759	73
55	Listowel	710	....	477	....	477	262	215	336	70
56	Little Current	*360	....	317	....	317	157	160	139	44
57	Massey	235	....	115	....	115	67	48	63	55
58	Mattawa	401	....	94	....	94	46	48	45	48
59	Meaford	552	....	470	....	470	243	227	285	61
60	Midland	1,126	....	999	....	999	489	510	629	63
61	Milton	475	....	391	....	391	200	191	270	69
62	Mitchell	477	....	329	....	329	157	172	229	69
63	Mount Forest	549	....	355	....	355	183	172	244	68
64	Napanee	589	....	516	....	516	250	266	393	76
65	New Liskeard	486	....	389	....	389	201	188	159	41
66	Newmarket	671	....	510	....	510	234	276	321	61
67	Niagara	344	....	199	....	199	111	88	114	57
68	North Bay	1,475	....	623	....	623	332	291	400	64
69	North Toronto	770	....	650	....	650	310	340	382	59
70	Oakville	445	....	348	....	348	188	160	206	59
71	Orangeville	666	....	509	....	509	244	265	338	66
72	Orillia	2,054	....	1,009	....	1,009	494	515	655	65
73	Oshawa	1,362	....	954	....	954	448	506	560	59
74	Owen Sound	2,777	....	1,735	....	1,735	827	908	1,226	71
75	Palmerston	526	....	385	....	385	190	195	254	66
76	Paris	930	....	514	....	514	276	238	359	70
77	Parkhill	336	....	297	....	297	165	132	160	54
78	Parry Sound	*1,013	....	921	1	922	412	510	492	53
79	Pembroke	1,500	....	703	....	703	348	355	474	67
80	†Penetanguishene	925	....	628	....	628	329	299	406	65
81	Perth	981	....	447	....	447	233	214	337	75
82	Petrolea	950	1	791	....	792	432	360	562	71
83	Picton	861	....	541	....	541	283	258	343	63
84	Port Arthur	2,000	....	984	....	984	493	491	510	52
85	Port Hope	1,121	....	800	....	800	400	400	580	72
86	Powassan	252	....	241	....	241	110	131	143	59
87	Prescott	771	....	410	....	410	191	219	288	70

* Estimated † Including Protestant Separate School.

THE PUBLIC SCHOOLS.—*Continued.*

I. Table A.—School Population, Attendance, etc.—*Concluded.*

Towns.	School population between 5 and 21 years of age.	Pupils under 5 years of age.	Pupils between 5 and 21 years of age.	Pupils over 21 years of age.	Total number of pupils attending school.	Boys.	Girls.	Average daily attendance of pupils.	Percentage of average to total attendance.
88 Preston	693	....	418	.. .	418	204	214	295	71
89 Rainy River	311	....	286	....	286	144	142	110	38
90 Renfrew	1,089	.. .	480	....	480	247	233	293	61
91 Ridgetown	434	....	401	....	401	191	210	260	65
92 St. Mary's	698	....	501	....	501	265	236	366	73
93 Sandwich	418	....	168	....	168	80	88	93	55
94 Sarnia	2,242	....	1,609	....	1,609	782	827	1,143	71
95 Sault Ste. Marie	1,693	....	1,168	....	1,168	595	573	875	75
96 Seaforth	558	....	288	....	288	141	147	219	76
97 Simcoe	721	....	518	....	518	268	250	328	63
98 Smith's Falls	1,109	....	1,039	....	1,039	506	533	724	70
99 Southampton	494	....	389	....	389	181	208	254	65
100 Stayner	385	....	292	....	292	154	138	201	69
101 Steelton	758	....	538	....	538	283	255	283	53
102 Strathroy	*750	....	473	....	473	235	238	353	74
103 Sturgeon Falls	*950	....	328	....	328	170	158	179	55
104 Sudbury	*796	....	284	....	284	148	136	161	57
105 Thessalon	434	....	387	2	389	195	194	204	53
106 Thornbury	201	....	166	....	166	79	87	103	62
107 Thorold	601	....	391	....	391	199	192	208	53
108 Tillsonburg	689	....	469	....	469	252	217	328	70
109 Toronto Junction	4,920	....	1,822	....	1,822	875	947	1,189	65
110 Trenton	933	....	490	....	490	235	255	366	75
111 Uxbridge	391	....	359	....	359	162	197	223	62
112 Vankleek Hill	497	....	145	....	145	82	63	95	65
113 Walkerton	676	....	381	....	381	168	213	285	75
114 Walkerville	573	....	410	....	410	208	202	269	66
115 Wallaceburg	1,238	....	648	....	648	314	334	395	61
116 Waterloo	1,035	....	572	....	572	300	272	420	73
117 Webbwood	176	....	161	....	161	72	89	81	50
118 Welland	430	....	358	....	358	195	163	203	57
119 Whitby	708	....	377	....	377	205	172	258	68
120 Wiarton	873	2	549	....	551	277	274	386	70
121 Wingham	605	....	562	....	562	252	310	356	63
Totals	105,568	13	66,292	10	66,315	32,942	33,373	43,122	65.02
Totals.									
1 Rural Schools	310,452	675	231,606	42	232,323	121,358	110,965	122,635	52.78
2 Cities	144,617	....	73,491	4	73,495	37,074	36,421	51,613	70.22
3 Towns	105,568	13	66,292	10	66,315	32,942	33,373	43,122	65.02
4 Villages	34,620	30	26,061	8	26,099	13,042	13,057	16,706	64.01
5 Grand totals, 1906	595,257	718	397,450	64	398,232	204,416	193,816	234,076	58.78
6 Grand totals, 1905	578,032	814	396,277	79	397,170	204,254	192,916	232,977	58.43
7 Increases	17,225	....	1,173	....	1,062	162	900	1,999	.35
8 Decreases	.....	96	.....	15	.....	.....	.....	.....	.....
9 Percentages	.....	.18	99.80	.02	.....	51.33	48.67	58.78	.....

THE PUBLIC

II.—Table B.—Number of pupils in the

Counties (including incorporated villages, but not cities or towns, etc.	Reading.						Art.
	1st Reader Part I.	1st Reader Part II.	2nd Reader.	3rd Reader.	4th Reader.	5th Reader.	
1 Brant	565	365	565	679	678	149	2,727
2 Bruce	1,989	1,092	1,643	1,817	1,640	396	7,531
3 Carleton	1,521	881	1,055	1,268	1,354	591	5,906
4 Dufferin	857	460	717	883	1,019	198	3,489
5 Dundas	1,045	444	954	756	701	206	3,514
6 Durham	731	613	952	924	790	199	3,917
7 Elgin	1,182	623	958	1,100	1,158	433	4,865
8 Essex	1.704	1,046	1,213	1,077	882	114	5,233
9 Frontenac	1,273	719	890	1,134	1,214	73	4,229
10 Glengarry	1,199	492	907	580	558	63	3,048
11 Grey	2,888	1,397	2,548	2,513	1,893	363	9,976
12 Haldimand	656	509	611	696	759	171	3,285
13 Haliburton	515	232	359	326	215	34	1.223
14 Halton	745	392	471	602	752	142	3,104
15 Hastings	2,418	1,428	1,579	1,496	1,200	282	6,422
16 Huron	1,499	855	1,773	1,999	2,017	821	7,688
17 Kent	1,847	924	1,408	1,199	1,388	704	7,106
18 Lambton	2,034	1,400	1,428	1,504	1,587	346	6,662
19 Lanark	863	560	748	815	844	165	3,995
20 Leeds and Grenville	1,896	1,146	1,526	1,746	1,970	341	8,028
21 Lennox & Addington	810	446	654	645	748	137	3,039
22 Lincoln	841	416	597	781	868	73	2,968
23 Middlesex	1,565	1,072	1,566	1,678	1,936	448	7,923
24 Norfolk	1,051	567	1,055	985	1,230	175	4,940
25 Northumberland	1,097	530	1,041	1,081	898	168	3,841
26 Ontario	1,381	866	1,166	1,325	1,472	204	5,304
27 Oxford	1,258	757	1,119	1,273	1,470	484	4,827
28 Peel	768	489	572	818	789	109	2,869
29 Perth	1,079	645	953	1,532	1,334	180	5,293
30 Peterborough	1,135	693	885	993	894	155	2,998
31 Prescott and Russell	1,684	789	842	769	754	93	4,080
32 Prince Edward	557	281	462	509	698	183	2,359
33 Renfrew	2,089	1,262	1,295	1,375	1,181	277	3,705
34 Simcoe	2,859	1,924	2,278	2,382	2,470	733	9,237
35 Stormont	836	440	760	631	692	114	2,055
36 Victoria	1,024	637	1,011	1,156	1,054	239	4,130
37 Waterloo	1,030	691	1,306	1,209	804	179	4,445
38 Welland	1,030	641	856	938	1,016	255	4,499
39 Wellington	1,397	862	1,275	1,553	1,696	431	5,876
40 Wentworth	943	562	843	1,138	1,035	159	4,958
41 York	3,100	1,610	2,253	2,346	2,410	233	10,299
42 Algoma & Manitoulin	1,540	800	1,022	950	885	113	4,390
43 Muskoka	1,037	492	745	699	533	87	2,535
44 Nipissing, etc.	1,291	738	580	569	320	47	3,335
45 Parry Sound	1,550	768	868	916	779	190	3,308
46 Rainy River & Thunder Bay	533	260	340	465	299	52	1,823
47 Moose Fort	5	3	5	3	6	.....	7
Totals	60,917	34,819	48,654	51,833	50,890	11,309	217,091
Totals, Incorporated Villages	6,060	3,351	4,683	4,780	4,733	2,492	23,709
Totals, Rural Schools	54,857	31,468	43,971	47,053	46,157	8,817	193,382

SCHOOLS.—*Continued.*

various branches of instruction.

	Geography.	Music.	Literature.	Composition.	Grammar.	English History.	Canadian History.	Physiology and Hygiene.
1	2,278	2,078	2,390	2,385	1,485	1,088	1,558	1,426
2	6,527	5,266	6,910	6,756	4,301	2,831	3,955	4,602
3	4,759	2,862	5,190	5,294	4,348	2,873	3,370	1,262
4	3,152	2,388	3,352	3,401	2,626	1,678	2,131	2,126
5	3,628	2,775	3,618	3,506	1,987	1,669	1,952	2,372
6	3,029	2,373	3,239	3,007	2,401	1,160	1,377	1,607
7	4,371	3,236	4,436	4,541	3,151	2,433	3,014	3,425
8	3,774	2,398	4,159	4,794	2,315	1,145	2,088	5,006
9	3,234	1,383	2,893	3,123	2,595	1,606	2,066	1,633
10	2,100	1,253	2,944	2,482	1,114	1,048	1,229	3,090
11	9,039	6,514	9,032	8,922	5,803	3,590	5,338	7,926
12	2,674	2,836	2 750	2,784	1,961	2,307	1,686	1,875
13	1,065	485	1,148	930	674	427	398	512
14	2,288	1,914	2,287	2,359	1,884	1,223	1,550	1,651
15	6,037	4,043	6,863	6,728	2,737	2,384	3,501	5,087
16	6,956	4,247	7,788	7,687	5,048	3,077	4,463	3,553
17	5,098	4,072	5,285	5,211	3,932	2,706	3,223	3,190
18	5,615	4,540	5,984	6,789	3,739	2,828	3,713	4,033
19	3,010	1,444	3,253	3,181	2,372	1,220	1,558	1,435
20	6,281	4,307	6,590	6,590	4,488	3,219	4,102	4,268
21	2,388	1,277	3,275	2,332	1,812	1,130	1,454	1,396
22	2,785	2,604	2,558	2,558	2,088	1,386	1,546	1,568
23	6,845	5,905	6,789	7,338	4,349	3,522	4,204	4,734
24	4,055	3,228	4,129	4,297	2,651	1,877	2,492	3,021
25	3,389	1,547	3,877	3,722	2,509	1,048	1,532	2,139
26	4,683	3,239	5,044	4,808	3,514	2,187	2,654	2,784
27	4,416	2,559	4,406	4,406	3,417	2,480	2,770	2,863
28	2,518	1,144	2,904	2,740	1,885	1,528	1,709	1,520
29	4,216	5,384	4,446	4,373	3,062	1,811	2,721	2,016
30	3,591	1,314	3,531	3,320	2,421	1,495	1,958	1,976
31	2,609	2,183	3,127	3,256	2,206	1,276	1,742	1,732
32	2,105	1,144	2,203	2,159	1,594	1,001	1,196	1,533
33	4,198	1,507	3,858	4,398	3,502	1,846	2,294	1,854
34	5,923	7,044	9,587	9,601	7,080	4,222	5,854	5,334
35	2,686	1,093	2,766	2,705	1,602	1,120	1,448	1,459
36	3,744	2,006	4,083	4,198	2,297	1,874	2,368	2,416
37	3,968	3,958	4,253	4,125	2,076	1,071	1,910	1,439
38	3,312	2,449	3,521	3,331	2,821	1,562	2,180	1,788
39	5,195	3,883	5,497	5,407	4,041	2,620	3,417	3,251
40	3,413	2,952	3,894	3,660	2,721	1,585	2,129	1,507
41	8,302	8,541	9,833	9,025	6,266	4,024	5,042	5,495
42	3,881	1,788	3,725	3,281	2,340	1,391	1,837	2,121
43	2,227	1,186	2,429	2,355	1,537	883	1,202	1,176
44	1,337	599	1,858	1,552	1,130	595	836	748
45	3,162	1,311	3,149	3,335	1,474	1,299	1,858	1,816
46	1,184	796	1,539	1,489	864	643	755	987
47	19	22	.....	9	9	9	.....	.....
	181,066	131,077	196,392	194,250	130,229	85,997	111,380	118,752
	20,907	17,813	22,370	22,263	14,199	9,874	12,798	13,312
	160,159	113,264	174,022	171,987	116,030	76,123	98,582	105,440

THE PUBLIC

II.—Table B.—Number of pupils in the

Counties (including incorporated villages, but not cities or towns, etc.	Nature Study.	Physical Culture.	Bookkeeping.	Algebra.
1 Brant	2,607	1,841	125	141
2 Bruce	6,875	3,268	313	369
3 Carleton	4,793	1,994	536	576
4 Dufferin	3,595	2,247	151	201
5 Dundas	3,579	2,315	136	199
6 Durham	3,125	1,453	175	180
7 Elgin	4,704	2,885	401	390
8 Essex	4,593	2,107	104	101
9 Frontenac	2,457	1,263	108	67
10 Glengarry	2,902	772	63	67
11 Grey	10,298	6,344	374	310
12 Haldimand	3,309	3,384	163	170
13 Haliburton	649	366	71	63
14 Halton	2,842	2,815	98	132
15 Hastings	6,365	4,060	822	271
16 Huron	7,109	4,829	686	789
17 Kent	6,103	3,350	651	710
18 Lambton	6,740	4,513	297	318
19 Lanark	3,449	2,220	133	160
20 Leeds and Grenville	6,569	3,555	236	259
21 Lennox and Addington	2,679	880	120	119
22 Lincoln	2,443	1,788	114	72
23 Middlesex	7,519	5,330	431	390
24 Norfolk	4,873	2,743	171	155
25 Northumberland	4,031	1,411	174	138
26 Ontario	4,820	2,682	260	209
27 Oxford	4,853	2,005	367	459
28 Peel	2,830	1,217	86	110
29 Perth	5,053	5,124	168	151
30 Peterborough	3,146	1,363	279	136
31 Prescott and Russell	3,420	2,272	83	85
32 Prince Edward	2,429	1,258	191	177
33 Renfrew	2,879	1,471	306	256
34 Simcoe	8,859	6,586	811	714
35 Stormont	2,343	879	192	106
36 Victoria	3,840	2,079	177	197
37 Waterloo	4,008	2,765	148	141
38 Welland	3,041	1,335	235	235
39 Wellington	5,366	3,132	352	386
40 Wentworth	3,823	2,239	121	128
41 York	8,900	8,168	475	210
42 Algoma and Manitoulin	3,877	1,458	153	108
43 Muskoka	1,843	1,209	161	81
44 Nipissing, etc.	808	559	53	28
45 Parry Sound	2,912	1,075	207	189
46 Rainy River and Thunder Bay	1,526	1,702	42	40
47 Moose Fort	.....	.....	6	.....
Totals	194,784	118,311	11,526	10,493
Totals, Incorporated Villages	21,430	14,619	2,001	2,436
Totals, Rural Schools	173,354	103,692	9,525	8,057

SCHOOLS.—*Continued.*

various branches of instruction.—*Continued,*

	Geometry.	Latin.	French.	German.	Elementary Science.	Commercial Subjects.	Agriculture.	Manual Training.	Household Science.
1	106	40	24	.....	99	.....	214	111	12
2	366	227	85	38	221	188	491	177	.....
3	560	410	246	.....	468	208	323	97	23
4	200	121	41	.....	122	83	141	127	28
5	196	84	47	.....	161	82	214	34	119
6	171	61	50	.....	87	36	42	35	.....
7	490	84	8	11	371	236	305	355	56
8	101	51	689	.....	81	43	506	.....	24
9	46	20	16	.....	12	6	149	112	.....
10	56	43	19	.....	36	.....	4	.....	.....
11	302	157	20	1	181	166	478	352	92
12	171	92	33	2	113	58	815	.....	.....
13	60	1	.....	.....	15	17	62	.....	.....
14	132	77	66	7	122	66	148	.....	.....
15	248	90	39	1	137	227	232	77	.....
16	647	257	129	4	312	345	461	192	76
17	710	155	124	5	508	256	1,455	896	.....
18	290	104	31	7	235	146	427	49	.....
19	153	122	84	2	175	101	89	87	.....
20	242	114	38	.....	162	110	175	.....	.....
21	115	73	1	.....	103	58	28	1	.....
22	42	22	.....	1	.....	3	236	61	.....
23	377	87	30	.....	237	62	419	390	28
24	148	22	4	.....	181	97	628	.....	26
25	130	89	62	.....	75	20	119	94	.....
26	174	16	1	.....	128	119	251	120	26
27	446	191	88	44	303	220	300	.....	.....
28	110	15	15	15	.....	39	28	.....	.....
29	150	82	4	66	77	72	1,530	.....	.....
30	125	24	24	.....	65	65	234	86	.....
31	77	34	2,082	.....	44	41	43	.....	.....
32	160	26	41	.....	103	128	574	.....	.....
33	250	58	80	1	74	140	281	113	.....
34	699	416	405	1	534	501	1,138	50	.....
35	97	33	83	.....	93	73	87	17	.....
36	167	60	31	17	121	71	202	.....	2
37	124	35	.....	184	70	64	102	.....	.....
38	217	38	9	8	107	116	150	22	122
39	343	211	106	10	257	220	723	159	72
40	126	37	3	8	121	96	397	110	25
41	189	100	72	.....	83	6	24	449	449
42	109	20	6	.....	29	31	86	.....	.....
43	88	6	2	.....	6	51	32	4	1
44	27	3	1,326	.....	97	61	230	68	.....
45	186	2	16	13	79	54	58	.....	.....
46	14	.....	25	25	15	5	27	.....	.....
47	6	.....	.....	.....	.....	6	.....	.....	.....
	9,943	4,010	6,305	471	6,620	4,793	14,658	4,445	1,181
	2,360	1,573	1,118	139	2,034	1,289	128	308	85
	7,583	2,437	5,187	332	4,586	3,504	14,530	4,137	1,096

THE PUBLIC

II.—Table B.—Number of pupils in the

Cities.	Reading.						Art.
	1st Reader, Part I.	1st Reader, Part II.	2nd Reader.	3rd Reader	4th Reader.	5th Reader.	
1 Belleville	323	243	237	319	203	.....	1,325
2 Brantford	591	474	408	604	550	89	2,601
3 Chatham	316	250	289	364	330	.....	1,549
4 Guelph	350	218	247	466	315	104	1,700
5 Hamilton	1,387	1,129	1,099	2,242	2,011	537	8,378
6 Kingston	573	310	286	641	600	.....	2,410
7 London	1,043	768	1,472	1,330	1,390	.....	6,003
8 Niagara Falls	467	157	182	221	257	.....	789
9 Ottawa	1,181	687	728	1,265	1,470	228	5,559
10 Peterborough	595	299	365	339	416	.....	2,014
11 St. Catharines	388	218	209	340	306	.....	1,073
12 St. Thomas	575	239	398	448	406	.....	2,066
13 Stratford	341	271	279	435	377	.....	1,703
14 Toronto	6,601	3,821	6,892	6,729	6,916	1,094	30,996
15 Windsor	710	263	251	311	222	.....	1,757
16 Woodstock	410	198	230	335	317	.....	1,490
Totals	15,851	9,545	13,572	16,389	16,086	2,052	71,413
Towns.							
1 Alexandria	17	7	14	13	14	.....	65
2 Alliston	85	35	47	39	72	97	375
3 Almonte	82	72	89	70	89	.....	11
4 Amherstburg	56	51	59	57	51	40	314
5 Arnprior	165	121	111	88	107	.....	592
6 Aurora	88	59	61	54	54	.....	316
7 Aylmer	51	50	89	89	108	.....	387
8 Barrie	261	179	279	226	236	.....	1,120
9 Berlin	268	238	461	405	245	.....	1,617
10 Blenheim	92	58	70	84	32	85	401
11 Blind River	402	47	29	24	26	6	532
12 Bonfield	15	7	4	3	12	4	45
13 Bothwell	45	18	26	23	31	78	159
14 Bowmanville	109	58	97	97	117	.....	478
15 Bracebridge	248	109	157	99	96	70	761
16 Brampton	128	62	114	127	82	.....	513
17 Brockville	270	181	208	257	274	.....	1,190
18 Bruce Mines	59	46	25	56	26	11	25
19 *Cache Bay	97	15	36	26	11	7	192
20 Campbellford	128	101	121	105	121	.....	576
21 Carleton Place	221	144	132	177	144	.....	818
22 Chesley	90	24	78	68	79	.....	339
23 Clinton	100	88	77	112	77	.....	400
24 Cobourg	116	59	103	125	147	.....	550
25 Collingwood	319	276	187	209	304	.....	1,295
26 Copper Cliff	172	71	60	43	27	10	383
27 Cornwall	211	49	157	133	105	.....	655
28 Deseronto	235	115	164	77	101	.....	692
29 Dresden	89	95	74	40	29	86	259
30 Dundas	148	118	56	109	140	.....	571
31 Dunnville	174	61	74	102	111	.....	522
32 Durham	82	39	80	50	61	111	290

* Statistics of preceding year.

SCHOOLS.—*Continued.*

various branches of instruction.—*Continued.*

	Geography.	Music.	Literature.	Composition.	Grammar.	English History.	Canadian History.	Physiology and Hygiene.
1	1,053	1,325	1,073	1,074	627	365	697	657
2	2,280	2,656	2,347	2,657	831	759	1,130	2,188
3	1,549	1,549	1,549	1,549	790	330	694	784
4	1,028	1,596	885	1,596	849	315	781	781
5	7,631	8,274	7,731	7,821	3,582	4,683	5,663	6,605
6	2,111	2,257	2,030	1,976	1,140	1,140	1,241	2,410
7	5,978	6,003	5,978	5,978	5,678	2,719	3,731	5,996
8	789	342	789	1,002	660	257	478	478
9	2,963	5,559	2,963	2,963	2,963	1,698	1,698	1,698
10	1,120	256	1,120	2,014	755	237	755	755
11	1,073	.....	855	855	646	306	463	514
12	2,066	1,857	2,066	2,066	406	406	954	2,066
13	1,703	909	1,703	1,703	586	277	526	1,703
14	31,868	31,259	27,493	30,930	26,582	6,108	9,786	25,595
15	784	1,757	1,757	1,757	784	302	538	784
16	1,080	.....	1,080	1,080	652	317	652	882
	65,076	65,599	61,419	67,021	47,531	20,219	29,787	53,896
1	65	65	65	65	27	27	27	27
2	375	375	375	375	375	208	208	156
3	267	64	402	402	221	89	119	89
4	207	.....	258	309	148	91	108	274
5	367	364	427	424	306	71	195	107
6	316	262	316	316	156	108	205	316
7	387	.....	387	387	387	68	108	108
8	1,181	1,120	1,181	1,044	564	564	625	793
9	1,111	1,617	1,617	1,617	245	650	650	1,617
10	271	.....	271	271	271	172	172	87
11	169	500	132	169	56	32	56	26
12	30	.....	45	45	30	19	19	30
13	176	112	221	221	159	109	158	80
14	352	478	478	352	259	117	214	478
15	778	725	779	779	265	265	531	726
16	513	513	513	513	217	210	248	209
17	1,190	1,190	1,190	1,190	531	531	531	1,190
18	148	154	148	148	99	99	99	58
19	80	47	192	192	113	18	66	37
20	347	455	347	347	226	72	121	347
21	544	.....	818	596	341	164	229	818
22	278	339	278	278	153	124	153	153
23	354	454	454	354	170	77	266	354
24	375	550	375	434	272	147	272	272
25	1,295	1,150	1,275	1,295	581	438	697	1,295
26	240	160	323	140	126	30	80	170
27	444	655	655	655	238	238	238	655
28	457	692	692	457	178	178	328	328
29	298	212	229	298	155	155	155	143
30	305	571	571	571	305	140	249	571
31	348	235	274	348	213	55	56	287
32	371	199	371	371	242	172	222	165

THE PUBLIC

II.—Table B.—Number of pupils in the

Cities.	Nature Study.	Physical Culture.	Bookkeeping.	Algebra.
1 Belleville	1,325	.....	.....	.....
2 Brantford	2,637	2,354	89	.....
3 Chatham	1,549	1,549	.....	.....
4 Guelph	1,700	1,700	104	.....
5 Hamilton	8,282	8,405	489	487
6 Kingston	2,410	2,410	.....	.....
7 London	5,996	5,996	60	.....
8 Niagara Falls	797	.....	.....	.....
9 Ottawa	1,698	5,559	228	.....
10 Peterborough	2,014	1,598	.....	.....
11 St. Catharines	1,461	1,461	.....	.....
12 St. Thomas	2,066	2,066	.....	.....
13 Stratford	1,703	.....	.....	.....
14 Toronto	30,514	30,156	2,864	.....
15 Windsor	1,757	1,757	.....	.....
16 Woodstock	1,082	.....	.....	.....
Totals	66,991	65,011	3,834	487
Towns.				
1 Alexandria	65	65	.....	.....
2 Alliston	375	375	45	97
3 Almonte	126	127	....	.....
4 Amherstburg	274	125	26	40
5 Arnprior	592	592	.....	.....
6 Aurora	316	262	.....	.....
7 Aylmer	387	387	.....	.....
8 Barrie	1,120	1,059	51	.....
9 Berlin	1,617	.....	.....	.....
10 Blenheim	421	36	78	85
11 Blind River	.....	.....	6	6
12 Bonfield	45	45	4	4
13 Bothwell	159	158	46	78
14 Bowmanville	478	478	.....	.....
15 Bracebridge	726	725	52	68
16 Brampton	513	513	.....	.....
17 Brockville	1,190	1,190	.....	.....
18 Bruce Mines	58	.....	6	41
19 *Cache Bay	113	192	7	7
20 Campbellford	576	455	....	.....
21 Carleton Place	818	818	.....	.....
22 Chesley	339	278	.....	.....
23 Clinton	354	354	.....	.....
24 Cobourg	550	85	.....	.....
25 Collingwood	1,295	1,295	.....	.....
26 Copper Cliff	270	100	.....	10
27 Cornwall	655	655	.....	.....
28 Deseronto	692	252	.....	.....
29 Dresden	229	143	47	86
30 Dundas	571	571	.....	.....
31 Dunnville	470	235	.....	.....
32 Durham	371	50	30	111

* Statistics of preceding year.

SCHOOLS.—*Continued.*

various branches of instruction.—*Continued.*

	Geometry.	Latin.	French.	German.	Elementary Science.	Commercial Subjects.	Agriculture.	Manual Training.	Household Science.
1									
2						89		459	431
3									
4								379	424
5	373				188	489			1,090
6	600							1,347	91
7									
8									
9						228		1,503	1,460
10									
11								1,461	
12								2,066	
13								189	205
14					75	1,094	75	24,751	7,886
15									
16								103	134
	973				263	1,900	75	32,258	11,721
1									
2	97	40	10		97	37			
3									
4	40	29	12		40	4			
5									
6									
7									
8									
9				794				245	245
10	85	57	33		85				
11	6	6	26		6	6			
12	4				4	4	4		
13	78	62		3	46				
14									
15	69	61	32	2	70	52			
16									
17								951	299
18	41	36			41				
19	7				7	7	7		
20									
21									
22									
23									
24								77	320
25									
26	10				7				
27									
28									
29	68	77	58		86	47			
30									
31									
32	111	59	59		111				

THE PUBLIC

II.—Table B.—Number of pupils in the

Towns.—*Continued.*	Reading.						
	1st Reader, Part I.	1st Reader, Part II.	2nd Reader.	3rd Reader.	4th Reader.	5th Reader.	Art.
33 East Toronto	290	140	158	147	172	.....	907
34 Essex	87	50	81	53	52	.....	323
35 Forest	76	48	55	43	82	.....	304
36 Fort Frances	53	49	26	36	28	21	213
37 Fort William	304	224	166	163	103	.....	960
38 Galt	315	166	182	297	341	.....	1,301
39 Gananoque	236	85	172	146	138	.....	777
40 Goderich	106	72	161	148	89	.....	576
41 Gore Bay	76	46	48	74	58	47	349
42 Gravenhurst	189	83	117	139	104	.....	632
43 Haileybury	103	58	10	46	22	1	79
44 Hanover	121	50	98	78	31	52	430
45 Harriston	61	50	91	78	81	.....	250
46 Hawkesbury	51	23	15	33	51	.....	173
47 Hespeler	70	127	52	108	83	20	.....
48 Huntsville	198	88	132	103	68	33	322
49 Ingersoll	182	77	163	185	176	.....	783
50 Kincardine	109	49	82	74	72	.....	386
51 Kingsville	125	49	72	62	52	26	318
52 Kenora	400	92	179	147	136	.....	954
53 Leamington	117	65	95	108	106	.....	491
54 Lindsay	235	105	191	292	214	.....	860
55 Listowel	105	50	71	115	136	.....	477
56 Little Current	92	31	56	72	58	8	255
57 Massey	35	23	16	18	17	6	115
58 Mattawa	26	14	13	23	18	.....	94
59 Meaford	144	44	112	79	91	.....	470
60 Midland	344	121	253	148	133	.....	999
61 Milton	126	60	43	38	58	66	360
62 Mitchell	56	46	38	87	102	.....	329
63 Mount Forest	62	48	55	93	97	.....	355
64 Napanee	118	104	118	89	87	.....	516
65 New Liskeard	122	68	74	58	53	14	389
66 Newmarket	135	90	107	102	76	.....	510
67 Niagara	54	17	17	54	57	.....	199
68 North Bay	262	75	121	95	70	.....	554
69 North Toronto	236	109	95	103	90	17	650
70 Oakville	95	58	80	55	60	.....	348
71 Orangeville	103	76	109	109	112	.....	509
72 Orillia	312	131	170	185	161	50	966
73 Oshawa	276	126	169	219	134	.....	954
74 Owen Sound	309	254	389	386	397	.....	1,735
75 Palmerston	102	86	57	48	40	52	306
76 Paris	138	75	83	138	80	.....	514
77 Parkhill	80	46	64	58	49	.....	297
78 Parry Sound	319	142	133	143	115	70	782
79 Pembroke	184	134	101	103	181	.....	703
80 *Penetanguishene	207	126	99	87	109	.....	478
81 Perth	90	61	82	110	104	.....	447
82 Petrolea	221	128	103	195	145	.....	792
83 Picton	101	79	102	113	146	.....	541
84 Port Arthur	310	129	156	227	162	.....	984
85 Port Hope	194	174	149	139	144	.....	800
86 Powassan	85	26	28	40	36	26	241

* Including Protestant Separate School.

SCHOOLS. *Continued.*

various branches of instruction.—*Continued.*

	Geography.	Music.	Literature.	Composition.	Grammar.	English History.	Canadian History.	Physiology and Hygiene.
33	720	907	907	907	474	172	477	907
34	236	.....	323	323	105	52	105	186
35	180	218	180	285	125	125	125	125
36	133	.....	145	104	104	61	86	49
37	500	960	600	600	400	300	300	600
38	950	1,301	1,301	1,301	341	287	638	1,125
39	541	407	777	777	138	138	284	541
40	398	576	398	576	237	89	237	89
41	349	.....	128	128	100	37	37	123
42	411	269	411	519	255	219	243	255
43	137	.....	240	137	137	79	79	78
44	430	430	430	430	213	213	259	378
45	300	250	250	250	250	250	250	250
46	173	.....	173	173	99	65	99	99
47	460	.....	390	460	211	103	211	83
48	385	.....	408	391	204	166	204	300
49	783	783	783	783	176	226	550	783
50	248	386	386	386	146	146	146	228
51	318	329	318	386	140	106	212	360
52	462	954	462	462	283	283	283	150
53	374	491	491	491	214	106	214	491
54	737	759	780	1,037	330	388	506	493
55	322	198	322	477	274	136	270	136
56	231	.....	204	204	138	66	138	58
57	80	.....	80	80	41	41	80	80
58	94	.....	94	94	41	18	23	94
59	470	470	470	470	170	59	170	470
60	750	585	999	999	999	355	599	554
61	265	391	391	391	205	124	162	325
62	227	329	227	273	189	102	189	150
63	293	355	245	293	190	97	190	293
64	516	516	516	516	176	176	176	516
65	389	275	389	389	125	389	389	389
66	375	510	285	375	278	76	144	144
67	199	54	179	179	128	57	90	128
68	554	570	623	623	224	112	165	213
69	438	650	650	650	438	110	314	314
70	348	348	348	348	60	60	115	348
71	406	397	509	509	157	406	406	406
72	569	744	723	723	347	294	519	466
73	507	802	954	954	446	134	134	134
74	1,735	1,735	1,735	1,735	397	560	783	1,735
75	249	368	306	376	319	137	192	91
76	514	.....	514	514	218	80	218	514
77	184	297	206	206	112	112	112	112
78	694	799	922	922	475	263	272	365
79	519	703	703	703	385	181	284	284
80	398	418	478	571	298	109	215	116
81	431	447	447	447	273	104	157	104
82	792	792	571	792	340	145	340	792
83	541	541	541	541	146	259	361	541
84	674	984	984	984	389	389	389	984
85	800	.....	432	800	283	432	432	800
86	156	.....	130	130	130	62	62	62

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II.—Table B.—Number of pupils in the

Towns—*Continued.*	Nature Study.	Physical Culture.	Bookkeeping.	Algebra.
33 East Toronto	907	907	.....	.....
34 Essex	236	323	.....	.....
35 Forest	190	190	.....	.....
36 Fort Frances	84	43	21	21
37 Fort William	960	960	.....	.....
38 Galt	1,301	.....	.....	.....
39 Gananoque	777	777	.....	.....
40 Goderich	576	576	.....	.....
41 Gore Bay	37	37	37	37
42 Gravenhurst	632	184	.....	.....
43 Haileybury	78	.....	.....	1
44 Hanover	378	.....	42	52
45 Harriston	250	250	.....	.....
46 Hawkesbury	173	173	.....	.....
47 Hespeler	460	.....	20	20
48 Huntsville	336	.....	33	33
49 Ingersoll	783	783	.....	.....
50 Kincardine	386	386	16	.....
51 Kingsville	329	329	26	26
52 Kenora	954	.....	.....	.....
53 Leamington	491	491	.....	.....
54 Lindsay	904	531	.....	.....
55 Listowel	477	.....	.....	.....
56 Little Current	217	.....	66	8
57 Massey	115	115	6	6
58 Mattawa	94	.....	1	.....
59 Meaford	470	470	.....	.....
60 Midland	999	468	.....	.....
61 Milton	260	391	41	66
62 Mitchell	329	.....	.....	.....
53 Mount Forest	355	355	.....	.....
64 Napanee	516	516	.....	.....
65 New Liskeard	389	389	14	14
66 Newmarket	510	510	.....	.....
67 Niagara	199	.....	.....	.....
68 North Bay	450	388	.....	.....
69 North Toronto	650	650	17	17
70 Oakville	348	348	.....	.....
71 Orangeville	509	509	.....	.....
72 Orillia	960	759	50	.....
73 Oshawa	954	279	.....	.....
74 Owen Sound	1,735	1,735	.....	.....
75 Palmerston	262	127	122	52
76 Paris	514	.....	.....	.....
77 Parkhill	297	.....	.....	.....
78 Parry Sound	852	225	41	70
79 Pembroke	.....	.....	.....	.....
80 *Penetanguishene	207	.....	.....	.....
81 Perth	447	447	.....	.....
82 Petrolea	792	792	.....	.....
83 Picton	541	541	.....	.....
84 Port Arthur	984	.....	.....	.....
85 Port Hope	800	800	.....	.....
86 Powassan	241	.....	26	26

* Including Protestant Separate School.

SCHOOLS.—*Continued.*

various branches of instruction.—*Continued.*

	Geometry.	Latin.	French.	German.	Elementary Science.	Commercial Subjects.	Agriculture.	Manual Training.	Household Science.
33									
34									
35									
36	21	15	17		21	21			
37					103				
38									
39									
40									
41	37	2	2	1	37	37			
42									
43	1	1							
44	52	45		44	52				
45									
46									
47	20				20				
48	33				33				
49									
50									
51	26	26			26	26			
52									
53									
54									
55									
56	8				8				
57	6				6	6			
58								94	
59									
60									
61	66	29	16		25				
62									
63									
64									
65	14	14	14		14				
66									
67									
68									
69	17	17	17		17	17			
70									
71									
72						50			
73									
74									
75	52	52	52	2	52	52			
76									
77									
78	70	39	18	4	70	43			
79									
80							49		
81									
82									
83									
84									
85									
86	26	10			20				

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II.—Table B.—Number of pupils in the

Towns—*Continued.*	Reading.						Art.
	1st Reader, Part I.	1st Reader, Part II.	2nd Reader.	3rd Reader.	4th Reader.	5th Reader.	
87 Prescott	99	86	48	54	123	.....	410
88 Preston	81	79	102	93	63	.....	418
89 Rainy River	115	50	46	41	25	9	286
90 Renfrew	171	62	73	66	108	.....	309
91 Ridgetown	80	51	82	87	101	.....	401
92 St. Mary's	95	66	70	134	136	.....	332
93 Sandwich	59	21	27	30	31	.....	150
94 Sarnia	523	201	267	273	345	.....	1,609
95 Sault Ste. Marie	293	194	284	245	152	.....	1,168
96 Seaforth	48	40	45	59	96	.....	288
97 Simcoe	122	60	148	63	125	.....	518
98 Smith's Falls	306	132	222	197	182	.....	1,039
99 Southampton	89	61	88	80	46	25	389
100 Stayner	52	29	48	46	41	76	292
101 Steelton	163	86	121	98	70	.....	534
102 Strathroy	96	57	99	108	113	.....	473
103 Sturgeon Falls	88	77	48	60	36	19	328
104 Sudbury	97	31	47	28	53	28	266
105 Thessalon	111	59	61	68	58	32	389
106 Thornbury	39	31	25	30	28	13	166
107 Thorold	111	62	89	76	53	.....	391
108 Tillsonburg	72	64	113	85	135	.....	469
109 Toronto Junction	461	299	331	317	414	.....	1,361
110 Trenton	118	72	105	101	94	.....	490
111 Uxbridge	86	49	81	92	51	.....	359
112 Vankleek Hill	43	5	28	24	45	.....	145
113 Walkerton	87	49	64	75	106	.....	381
114 Walkerville	130	51	54	91	57	27	280
115 Wallaceburg	239	72	94	105	57	81	648
116 Waterloo	108	90	136	125	113	.....	572
117 Webbwood	68	16	24	16	31	6	47
118 Welland	91	57	72	62	76	.....	358
119 Whitby	90	36	70	68	113	.....	377
120 Wiarton	130	134	78	107	102	.....	551
121 Wingham	80	67	113	116	94	92	470
Totals	17,811	9,796	12,351	12,626	12,179	1,552	62,164
Totals.							
1 Rural Schools	54,857	31,468	43,971	47,053	46,157	8,817	193,382
2 Cities	15,851	9,545	13,572	16,389	16,086	2,052	71,413
3 Towns	17,811	9,796	12,351	12,626	12,179	1,552	62,164
4 Villages	6,060	3,351	4,683	4,780	4,733	2,492	23,709
5 Grand Totals, 1906	94,579	54,160	74,577	80,848	79,155	14,913	350,668
6 Grand Totals, 1905	93,221	54,402	74,536	81,460	78,313	15,238	353,038
7 Increases	1,358	.....	41	.....	842	.....	.....
8 Decreases	.....	242	.....	612	.....	325	2,370
9 Percentages	23.75	13.60	18.73	20.30	19.88	3.74	88.05

SCHOOLS.—*Continued.*

various branches of instruction.—*Continued.*

	Geography.	Music.	Literature.	Composition.	Grammar.	English History.	Canadian History.	Physiology and Hygiene.
87	410	410	410	410	123	177	410	410
88	418	418	418	337	156	63	156	191
89	171	286	286	286	75	75	75	112
90	309	200	480	393	247	108	174	253
91	270	342	401	401	222	270	270	270
92	393	205	335	421	270	199	320	172
93	150	36	107	107	107	88	88	88
94	969	1,554	1,135	1,486	618	574	704	1,483
95	1,101	1,168	1,168	1,056	808	281	590	882
96	241	.....	288	288	155	69	200	69
97	518	518	336	518	188	188	188	518
98	1,039	1,039	1,039	1,039	379	182	379	182
99	270	364	308	308	148	78	148	123
100	292	216	292	292	117	117	163	87
101	480	365	480	390	238	110	377	467
102	377	473	473	473	221	377	377	473
103	328	145	183	328	129	70	70	96
104	197	138	197	284	156	56	81	30
105	389	389	389	389	90	158	158	389
106	127	80	121	121	83	71	121	166
107	280	.....	280	294	218	74	129	218
108	397	469	469	469	220	405	397	220
109	1,062	1,362	1,822	1,822	791	791	791	1,822
110	300	490	351	490	195	94	129	195
111	224	359	224	359	143	51	143	224
112	145	145	145	145	88	88	145	145
113	245	381	245	381	181	106	181	245
114	229	410	280	280	175	84	175	280
115	331	.....	648	409	243	337	337	57
116	442	.....	497	497	238	181	238	113
117	77	161	161	77	53	6	31	37
118	358	358	358	358	210	76	138	138
119	377	377	377	377	196	113	164	377
120	287	551	551	551	209	102	209	551
121	415	386	562	562	302	302	302	94
	51,202	50,481	57,933	59,535	28,694	20,815	29,598	42,554
1	160,159	113,264	174,022	171,987	116,030	76,123	98,582	105,440
2	65,076	65,599	61,419	67,021	47,531	20,219	29,787	53,896
3	51,202	50,481	57,933	59,535	28,694	20,815	29,598	42,554
4	20,907	17,813	22,370	22,263	14,199	9,874	12,798	13,312
5	297,344	247,157	315,744	320,806	206,454	127,031	170,765	215,202
6	292,452	241,167	305,154	301,842	211,497	117,618	164,863	204,851
7	4,892	5,990	10,590	18,964	.....	9,413	5,902	10,351
8	.....	.....	.....	.....	5,043	.....	.....	.....
9	74.66	62.06	79.28	80.55	51.84	31.89	42.88	54.04

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II.—Table B.—Number of pupils in the

Towns—*Concluded.*	Nature Study.	Physical Culture.	Bookkeeping.	Algebra.
87 Prescott	410	410	.....	.....
88 Preston	418	418	.....	.....
89 Rainy River	286	286	9	9
90 Renfrew	480	182	79	.....
91 Ridgetown	401	401	.....	.....
92 St. Mary's	453	144	.....	.....
93 Sandwich	150	168	.....	.....
94 Sarnia	1,609	1,609	.....	.....
95 Sault Ste. Marie	1,168	824	.....	.....
96 Seaforth	155	200	.....	.....
97 Simcoe	518	518	.....	.....
98 Smith's Falls	1,039	1,039	.....	.....
99 Southampton	223	.....	25	25
100 Stayner	87	292	54	76
101 Steelton	534	187	88	.....
102 Strathroy	473	473	.....	.....
103 Sturgeon Falls	51	.....	19	19
104 Sudbury	54	.....	21	28
105 Thessalon	357	389	32	32
106 Thornbury	166	125	13	41
107 Thorold	254	167	.....	.....
108 Tillsonburg	469	469	.....	.....
109 Toronto Junction	1,822	1,822	.....	.....
110 Trenton	490	424	.....	.....
111 Uxbridge	224	359	.....	.....
112 Vankleek Hill	145	145	.....	.....
113 Walkerton	381	381	.....	.....
114 Walkerville	280	410	27	27
115 Wallaceburg	409	.....	48	81
116 Waterloo	572	.....	.....	.....
117 Webbwood	161	161	6	6
118 Welland	358	358	.....	.....
119 Whitby	377	377	.....	.....
120 Wiarton	551	.....	.....	.....
121 Wingham	376	.....	48	92
Totals	59,361	42,112	1,446	1,518
Totals.				
1 Rural Schools	173,354	103,692	9,525	8,057
2 Cities	66,991	65,011	3,834	487
3 Towns	59,361	42,112	1,446	1,518
4 Villages	21,430	14,619	2,001	2,436
5 Grand Totals, 1906	321,136	225,434	16,806	12,498
6 Grand Totals, 1905	303,154	231,539	17,027	12,683
7 Increases	17,982	.....	.....	.....
8 Decreases	.....	6,105	221	185
9 Percentages	80.64	56.61	4.22	3.14

SCHOOLS.—*Continued.*

various branches of instruction.—*Concluded.*

	Geometry.	Latin.	French.	German.	Elementary Science.	Commercial Subjects.	Agriculture.	Manual Training.	Household Science.
87	.....	.....	.....	.....	.....	.....	.....	.....	.....
88	.....	.....	.....	.....	.....	.....	.....	.....	.....
89	9	9	.....	.....	.....	9	.....	.....	.....
90	.....	.....	.....	.....	.....	79	.....	57	38
91	.....	.....	.....	.....	.....	.....	.....	.....	.....
92	.....	.....	.....	.....	.....	.....	.....	.....	.....
93	.....	.....	.....	.....	.....	.....	.....	.....	.....
94	.....	.....	.....	.....	.....	.....	.....	.....	.....
95	.....	.....	.....	.....	.....	.....	.....	.....	.....
96	.....	.....	.....	.....	.....	.....	.....	.....	.....
97	.....	.....	.....	.....	.....	.....	.....	.....	.....
98	.....	.....	.....	.....	182	182	.....	.....	.....
99	25	10	6	4	25	25	.....	.....	.....
100	76	49	25	.....	54	54	.....	.....	.....
101	.....	.....	.....	.....	.....	.....	.....	.....	.....
102	.....	.....	.....	.....	.....	.....	.....	.....	.....
103	19	15	.....	.....	.....	.....	.....	.....	.....
104	28	28	5	.....	26	.....	.....	.....	.....
105	32	22	5	.....	32	.....	.....	.....	.....
106	41	3	.....	.....	13	13	.....	.....	.....
107	.....	.....	.....	.....	.....	.....	.....	.....	.....
108	.....	.....	.....	.....	.....	.....	.....	.....	.....
109	.....	.....	.....	.....	.....	.....	.....	.....	.....
110	.....	.....	.....	.....	.....	.....	.....	.....	.....
111	.....	.....	.....	.....	.....	.....	.....	.....	.....
112	.....	.....	.....	.....	.....	.....	.....	.....	.....
113	.....	.....	.....	.....	.....	.....	.....	.....	.....
114	27	25	.....	.....	15	27	.....	.....	.....
115	81	34	8	1	81	.....	.....	.....	.....
116	.....	.....	.....	71	.....	.....	.....	.....	.....
117	6	6	.....	.....	6	37	.....	.....	.....
118	.....	.....	.....	.....	.....	.....	.....	.....	.....
119	.....	.....	.....	.....	.....	.....	.....	.....	.....
120	.....	.....	.....	.....	.....	.....	.....	.....	.....
121	92	86	21	.....	92	92	.....	.....	.....
	1,501	964	436	926	1,630	927	60	1,424	902
1	7,583	2,437	5,187	332	4,586	3,504	14,530	4,137	1,096
2	973	.....	.....	.....	263	1,900	75	32,258	11,721
3	1,501	964	436	926	1,630	927	60	1,424	902
4	2,360	1,573	1,118	139	2,034	1,289	128	308	85
5	12,417	4,974	6,741	1,397	8,513	7,620	14,793	38,127	23,804
6	13,263	4,217	6,265	356	8,897	6,788	23,033	10,909	3,150
7	.....	757	476	1,041	.....	832	.....	27,218	20,654
8	846	.....	.....	.....	384	.....	8,240	.....	.....
9	3.12	1.25	1.66	.35	2.13	1.91	3.71	9.57	5.98

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III.—Table C.—Teachers, Salaries,

	Rural Schools.	Number of teachers.	Male.	Female.	Salaries. Highest salary paid.	Average salary male teacher.	Average salary female teacher.
					$	$	$
1	Brant	70	15	55	600	449	365
2	Bruce	180	43	137	600	407	241
3	Carleton	145	22	123	600	395	362
4	Dufferin	94	11	83	500	395	344
5	Dundas	84	27	57	750	381	324
6	Durham	108	24	84	550	400	343
7	Elgin	119	28	91	600	441	360
8	Essex	120	35	85	675	458	376
9	Frontenac	146	17	129	500	316	256
10	Glengarry	77	8	69	550	375	292
11	Grey	238	62	176	575	411	352
12	Haldimand	81	16	65	700	435	343
13	Haliburton	62	7	55	530	373	215
14	Halton	59	9	50	525	431	360
15	Hastings	184	38	146	650	386	288
16	Huron	194	56	138	550	428	354
17	Kent	140	32	108	800	514	380
18	Lambton	175	32	143	600	417	364
19	Lanark	127	12	115	400	314	287
20	Leeds and Grenville	237	37	200	500	341	279
21	Lennox and Addington	117	17	100	500	316	276
22	Lincoln	66	17	49	575	425	341
23	Middlesex	191	38	153	525	467	366
24	Norfolk	104	25	79	500	395	338
25	Northumberland	106	32	74	650	422	343
26	Ontario	124	22	102	600	436	354
27	Oxford	131	42	89	750	482	344
28	Peel	81	25	56	550	496	344
29	Perth	120	38	82	550	451	363
30	Peterborough	101	18	83	550	378	311
31	Prescott and Russell	106	14	92	1,000	425	277
32	Prince Edward	79	14	65	625	413	322
33	Renfrew	155	17	138	500	353	275
34	Simcoe	234	81	153	700	431	344
35	Stormont	87	13	74	450	361	295
36	Victoria	109	23	86	550	420	322
37	Waterloo	100	36	64	600	475	864
38	Welland	89	10	79	650	484	333
39	Wellington	149	40	109	1,000	484	365
40	Wentworth	92	22	70	600	460	367
41	York	193	58	135	1,000	483	357
42	Algoma and Manitoulin	131	25	106	600	439	319
43	Muskoka	99	8	91	500	339	271
44	Nipissing, etc	93	17	76	650	407	282
45	Parry Sound	126	17	109	600	422	282
46	Rainy River and Thunder Bay	59	18	41	1,000	455	394
1	Totals, Rural Schools	5,682	1,218	4,464	1,000	425	325
2	" Cities	1,367	199	1,168	1,700	1,039	533
3	" Towns	1,187	195	992	1,200	761	382
4	" Villages	517	136	381	1,000	619	342
5	Grand Totals 1906	8,753	1,748	7,005	1,700	547	369
6	" " 1905	8,679	1,839	6,840	1,600	514	348
7	Increases	74	.....	165	100	33	21
8	Decreases	.....	91	.....	.....	.....	.....
9	Percentages	.....	19.97	80.03	.....	.....	.....

SCHOOLS.—*Continued.*

Certificates, Experience, etc.

Number of University Graduates.	Number of teachers who have attended Normal School or Normal College.	Certificates.					
		Provincial First Class or Interim from Normal College.	Provincial Second Class or Interim from one of the Normal Schools.	Old County Board Certificates.	Third Class and renewals of Third Class.	District.	Temporary.
1.....	40	9	31	.....	29	.....	1
2.....	51	6	94	.....	63	1	16
3 1	77	14	63	.....	41	2	25
4	26	5	22	.....	67	.....	.....
5.....	22	1	21	.....	62	.....	.....
6.....	33	2	31	.....	72	.....	3
7	54	6	48	.....	64	.....	1
8 1	39	6	34	1	59	9	11
9 1	17	1	16	.....	76	12	41
10 1	9	.....	9	1	46	9	12
11.....	59	5	57	2	159	8	7
12	31	5	26	.....	50	.....	.....
13 1	5	.....	5	.....	15	20	22
14 1	26	2	23	....	33	.....	1
15.....	45	8	38	2	66	22	48
16 1	74	6	69	.....	118	.....	1
17 3	55	7	48	.....	81	.....	4
18.....	78	3	75	.....	85	6	6
19 1	22	.....	22	.....	82	2	21
20.....	34	4	30	1	172	20	10
21.....	14	2	11	1	66	5	32
22.....	31	2	30	3	28	3	.....
23.....	96	7	89	1	94	.....	.....
24.....	36	1	35	.....	59	.....	9
25	48	7	41	1	49	1	7
26	42	.....	44	1	74	.....	5
27.....	64	8	55	1	66	.....	1
28.....	28	3	25	.....	53	.....	.....
29 1	47	1	46	1	69	....	3
30.....	26	....	26	.....	35	14	26
31.....	10	2	10	.....	33	48	13
32 1	26	2	24	.....	44	.....	9
33.....	9	1	8	....	74	47	25
34 1	57	6	53	1	158	7	9
35.....	13	2	10	2	57	12	4
36.....	29	.....	29	.....	52	3	25
37.....	44	6	41	1	50	2	.....
38.....	31	4	25	2	52	6	.....
39.... ...	69	7	61	1	69	2	9
40.....	52	11	41	.....	39	.....	1
41.....	115	10	106	1	75	.....	1
42 1	7	2	11	.....	20	68	30
43.....	3	2	2	.....	29	45	21
44.....	10	1	10	... .	11	13	58
45.....	9	.....	9	.....	26	48	43
46.....	17	1	16	.....	22	3	17
1 15	1,730	178	1,620	24	2,844	438	578
2 37	1,328	273	1,058	9	27	.....	.....
3 30	989	151	849	22	140	14	11
4 12	378	73	308	8	115	8	5
5 94	4,425	675	3,835	63	3,126	460	594
6 77	4,442	649	3,852	62	3,136	442	538
7 17	.....	26	.....	1	.....	18	56
8.....	17	.....	17	.....	10	.....	.....
9 1.07	50.55	7.71	43.81	.72	35.71	5.25	6.79

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III.—Table C.—Teachers, Salaries,

Rural Schools.	Experience.				
	Average experience in years of male teachers.	Average experience in years of female teachers.	Average experience in years of all teachers.	No. of teachers who at end of year have taught less than one year.	1 year.
1 Brant	7.53	4.89	5.45	2	17
2 Bruce	4.25	1.75	2.55	19	49
3 Carleton	4.74	4.00	4.11	15	32
4 Dufferin	5.13	3.44	3.63	1	28
5 Dundas	6.19	4.04	4.73	1	21
6 Durham	5.60	4.00	4.35	.....	27
7 Elgin	4.66	4.05	4.19	4	20
8 Essex	9.14	5.44	6.51	6	29
9 Frontenac	4.70	3.73	3.84	1	57
10 Glengarry	8.31	4.92	5.27	2	17
11 Grey	6.95	3.26	4.22	11	59
12 Haldimand	4.56	3.57	4.11	.....	22
13 Haliburton	4.93	3.06	3.27	8	14
14 Halton	8.88	4.81	5.54	2	13
15 Hastings	6.35	3.95	4.81	18	36
16 Huron	8.24	3.52	4.88	8	40
17 Kent	8.54	4.72	5.69	11	31
18 Lambton	5.34	4.29	4.48	4	44
19 Lanark	6.62	5.14	5.28	8	33
20 Leeds and Grenville	4.93	4.18	4.29	12	72
21 Lennox and Addington	4.00	4.03	4.02	7	35
22 Lincoln	9.65	3.52	5.10	6	11
23 Middlesex	9.03	4.31	5.31	6	41
24 Norfolk	7.70	6.44	6.74	2	21
25 Northumberland	7.14	5.27	5.83	10	18
26 Ontario	9.59	4.13	5.10	23	20
27 Oxford	9.34	4.61	6.13	4	33
28 Peel	4.96	4.18	4.42	.....	23
29 Perth	9.66	3.73	5.66	5	28
30 Peterborough	6.28	3.34	3.81	14	20
31 Prescott and Russell	2.70	5.11	4.77	5	19
32 Prince Edward	8.36	4.53	5.21	2	15
33 Renfrew	3.76	4.44	4.36	5	30
34 Simcoe	6.95	3.75	4.87	21	32
35 Stormont	5.77	4.66	4.72	3	17
36 Victoria	7.65	4.27	6.32	7	18
37 Waterloo	9.71	3.68	5.86	2	17
38 Welland	12.00	4.67	5.48	7	16
39 Wellington	8.71	4.51	5.70	12	30
40 Wentworth	7.95	5.20	5.85	10	14
41 York	8.82	5.29	6.35	8	30
42 Algoma and Manitoulin	6.88	3.46	4.12	29	22
43 Muskoka	7.81	3.48	3.83	8	23
44 Nipissing, etc	8.68	3.64	4.56	16	20
45 Parry Sound	5.87	3.24	3.60	22	23
46 Rainy River & Thunder Bay	9.22	4.96	6.26	8	3
1 Totals, Rural Schools	7.24	4.16	4.82	375	1,240
2 " Cities	16.77	13.44	13.92	12	20
3 " Towns	17.52	9.83	11.10	31	51
4 " Villages	13.52	7.64	9.19	19	34
5 Grand Totals, 1906	9.96	6.70	7.35	437	1,345
6 " " 1905	9.30	6.40	7.00	458	1,326
7 Increases	.66	.30	.35	.....	19
8 Decreases	.....	.....	.....	21	.....
9 Percentages	.....	.....	.....	4.99	15.37

SCHOOLS.—*Continued.*

Certificates, Experience, etc.—*Continued.*

		Experience.											
	2 years.	3 years.	4 years.	5 years.	6 years.	7 years.	8 years.	9 years.	10 years.	11 years.	12 years.	13 years.	14 years.
1	9	8	5	2	6	3	2	2	1	3	.....	2	3
2	35	22	9	8	11	4	6	2	1	3	2	3	2
3	15	21	12	10	10	8	3	6	6	1	1	.....	.....
4	16	13	14	4	5	.....	2	1	7	1	.....	1	.....
5	17	20	2	2	1	3	2	4	2	1	1	.....	2
6	22	22	9	5	4	1	2	1	5	2	3	.....	.....
7	32	20	12	4	4	2	4	4	2	2	1	.....	2
8	15	17	11	2	7	5	2	.....	4	2	2	1	2
9	19	23	10	6	6	.....	2	2	6	6	2	.....	1
10	12	9	4	7	3	5	2	2	1	2	1	.....	1
11	46	35	20	21	12	9	1	3	2	2	2	2	3
12	18	16	2	2	4	2	.....	3	6	1	2	.....	1
13	12	9	1	6	4	.....	4	2	.....	2	.....	.....	.....
14	12	6	1	6	4	1	1	2	.....	.....	1	2	2
15	29	24	13	11	8	8	7	2	3	6	3	1	2
16	40	33	18	3	7	11	5	2	5	5	2	.....	1
17	19	18	10	14	5	5	6	4	1	2	3	1	1
18	31	31	8	13	9	8	1	6	3	4	.....	3	.....
19	14	11	14	3	12	8	8	1	4	.....	4	.....	2
20	37	43	6	14	4	6	4	5	9	4	1	3	2
21	17	14	7	10	6	7	4	1	4	.....	.....	1	.....
22	11	10	5	3	3	2	1	2	2	2	1	.....	.....
23	39	24	12	11	7	10	4	6	3	3	3	3	3
24	15	13	8	8	8	3	7	2	5	1	.....	3	2
25	19	14	5	8	4	5	2	.....	6	2	4	.....	1
26	14	5	17	5	9	6	4	3	1	1	1	3	2
27	20	9	17	5	5	8	4	2	3	3	1	1	1
28	14	16	6	3	2	3	3	1	3	1	.....	2	.....
29	25	17	6	6	3	5	1	3	4	1	3	.....	.....
30	12	21	7	9	4	3	4	1	1	.....	.....	.....	.....
31	23	13	11	7	5	4	4	6	2	1	1	.....	.....
32	10	13	8	2	4	3	6	4	4	3	.....	.....	.....
33	27	29	10	22	5	1	7	3	7	2	2	1	.....
34	47	35	28	16	13	7	2	6	1	3	4	2	2
35	21	7	8	9	7	1	1	2	3	1	.....	.....	1
36	20	18	6	9	4	5	2	6	2	2	3	2	.....
37	20	19	7	3	8	2	3	2	1	2	3	.....	1
38	16	8	7	5	4	7	2	2	4	1	1	1	.....
39	22	18	10	7	2	12	4	2	5	4	2	3	2
40	15	7	10	3	5	4	5	2	2	2	1	1	1
41	36	14	15	11	13	9	7	9	6	4	4	4	2
42	22	13	8	8	6	2	4	6	1	1	.....	2	1
43	21	15	6	4	4	5	2	2	3	1	.....	1	.....
44	10	10	8	5	5	2	2	2	2	1	1	1	.....
45	22	19	10	8	4	1	3	4	1	1	5	.....	.....
46	8	8	6	3	2	1	3	2	.....	5	3	1	.....
1	976	790	429	333	268	207	155	135	144	97	74	51	46
2	53	51	63	72	71	62	63	58	68	49	55	53	52
3	53	64	70	95	80	75	79	65	59	31	52	37	22
4	41	55	36	41	43	24	21	20	18	13	22	9	11
5	1,123	960	598	541	462	368	318	278	289	190	203	150	131
6	*	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
9	12.8	10.9	6.8	6.2	5.3	4.2	3.6	3.2	3.3	2.2	2.3	1.7	1 5

*The numbers from 2 to 40 years and over are not known for 1905.

THE PUBLIC

III.—Table C.—Teachers, Salaries

Rural Schools.	Experience.												
	15 years.	16 years.	17 years.	18 years.	19 years.	20 years.	21 years.	22 years.	23 years.	24 years.	25 years.	26 years.	27 years.
1 Brant	3	....	1	1	....	....	....	....	....	....	....	....	....
2 Bruce	....	2	....	....	1	....	....	....	....	....	....	....	....
3 Carleton	2	2	....	....	....	....	....	....	....	....	....	....	1
4 Dufferin	1	....	....	....	....	....	....	....	....	....	....	....	....
5 Dundas	....	1	....	1	....	....	....	1	....	1	....	....	1
6 Durham	1	1	....	....	....	1	1	....	....	....	1	....	....
7 Elgin	1	1	....	1	....	....	....	....	1	....	....	....	1
8 Essex	1	2	1	2	....	....	1	1	....	....	2	1	....
9 Frontenac	1	....	2	....	1	1	....	....	....	....	....	....	....
10 Glengarry	2	....	....	1	1	....	....	....	....	2	1	....	....
11 Grey	....	....	....	1	....	1	1	2	1	1	2	....	....
12 Haldimand	....	....	....	....	....	1	1	....	....	....	....	....	....
13 Haliburton	....	....	....	....	....	....	....	....	....	....	....	....	....
14 Halton	1	1	1	....	....	1	1	....	....	....	....	....	1
15 Hastings	2	1	2	1	1	1	1	1	....	1	1	1	....
16 Huron	....	5	....	....	....	1	1	....	1	....	1	1	2
17 Kent	....	....	....	....	....	2	....	....	1	....	....	....	3
18 Lambton	3	1	....	1	....	....	....	1	....	1	....	1	....
19 Lanark	2	2	....	....	1	....	....	....	....	....	....	....	....
20 Leeds and Grenville	2	3	4	1	....	1	....	....	....	....	2	....	....
21 Lennox and Addington	....	1	....	1	....	....	....	....	....	....	....	1	....
22 Lincoln	1	2	....	1	....	....	1	....	....	....	....	....	1
23 Middlesex	3	1	2	3	....	2	....	2	1	....	....	....	....
24 Norfolk	2	....	....	1	....	....	....	1	1	....	....	....	....
25 Northumberland	1	....	....	1	....	....	1	....	....	....	1	....	....
26 Ontario	1	2	....	....	1	1	1	....	....	1	2	....	....
27 Oxford	2	2	1	....	2	1	....	1	....	2	....	....	1
28 Peel	....	....	....	....	....	....	....	1	1	....	....	....	....
29 Perth	1	2	2	2	....	....	....	1	4	....	1	....	....
30 Peterborough	....	2	....	1	....	....	....	....	....	1	....	....	1
31 Prescott and Russell	....	2	....	....	....	1	....	....	....	....	1	....	....
32 Prince Edward	2	1	1	....	....	....	....	....	1	....	....	....	....
33 Renfrew	1	....	....	....	1	1	....	....	....	....	....	....	....
34 Simcoe	1	3	2	1	1	....	1	....	2	....	....	....	....
35 Stormont	....	1	....	2	....	2	....	....	....	....	....	....	....
36 Victoria	....	....	....	....	1	1	....	....	....	....	1	....	1
37 Waterloo	1	1	1	2	....	....	....	....	1	....	....	1	....
38 Welland	....	3	....	....	1	....	....	....	....	1	....	....	....
39 Wellington	2	1	....	1	....	3	1	1	....	....	2	1	....
40 Wentworth	2	2	....	....	1	1	....	....	1	....	....	....	....
41 York	3	1	1	5	1	3	....	1	1	1	....	....	....
42 Algoma and Manitoulin	....	1	....	1	....	1	....	....	....	....	2	....	....
43 Muskoka	1	....	....	....	....	1	....	....	....	....	1	....	....
44 Nipissing, etc	4	1	....	....	....	1	....	....	....	2	....	....	....
45 Parry Sound	....	1	....	....	....	....	1	....	....	....	1	....	....
46 Rainy River & Thunder Bay	1	1	1	1	....	1	....	....	....	....	....	....	....
1 Totals, Rural Schools	51	53	22	33	14	30	13	14	17	14	22	7	13
2 " Cities	58	40	45	43	49	42	37	23	21	21	18	20	19
3 " Towns	37	23	31	22	22	22	22	20	8	5	9	10	13
4 " Villages	15	10	8	11	4	11	6	4	5	7	2	2	6
5 Grand Totals, 1906	161	126	106	109	89	105	78	61	51	47	51	39	51
6 * " " 1905	....	....	....	....	....	....	....	....	....	....	....	....	....
7 Increases	....	....	....	....	....	....	....	....	....	....	....	....	....
8 Decreases	....	....	....	....	....	....	....	....	....	....	....	....	....
9 Percentages	1.8	1.4	1.2	1.2	.1	1.2	.9	.7	.6	.5	.6	.4	.6

* Not known.

SCHOOLS.—*Continued.*

Certificates, Experience, etc.—*Concluded.*

		Experience.											
	28 years.	29 years.	30 years.	31 years.	32 years.	33 years.	34 years.	35 years.	36 years.	37 years.	38 years.	39 years.	40 years and over.
1													
2				1									
3													
4													
5													
6													
7													1
8	1						1						2
9													
10	1			1									
11													1
12													
13													
14													
15													
16	1												1
17			1			1	1						
18			2										
19													
20	1								1				
21			1										
22					1								
23					1		1						
24						1							
25								1				1	2
26								1					
27					1	1							1
28					1								1
29													
30													
31									1				
32													
33											1		
34							1	1		1			1
35			1										
36	1												
37	1		1							1			
38		1	2										
39	1		1										
40		2	1										
41	1		1	1				1					
42								1					
43						1							
44													
45													
46				1									
1	8	3	11	4	4	4	4	5	2	2	1	1	10
2	16	18	15	8	6	9	9	12	6	9	7	5	9
3	7	8	18	3	8	2	5	6	8	1	4	2	7
4	1	3		2	1	3	2	1	1	1			4
5	32	32	44	17	19	18	20	24	17	13	12	8	30
6													
7													
8													
9	.3	.3	.5	.2	.2	.2	.2	.3	.2	.15	.14	.1	.3

THE PUBLIC

IV. Table D.—School

	Totals.	School Houses.					School Visits.				
		Number of Schools.	Brick.	Stone.	Frame.	Log.	By Inspector.	By Trustees.	By Clergymen.	By other Persons.	Total.
1	Rural Schools....	5,223	2,292	451	2,242	238	9,992	6,891	2,556	17,560	36,999
2	Cities.....	183	160	18	5	.....	3,515	1,877	493	12,862	18,747
3	Towns.....	243	171	28	44	.....	2,125	2,082	396	2,602	7,205
4	Villages	148	120	11	17	.....	837	570	286	1,513	3,206
5	Grand Totals, 1906	5,797	2,743	508	2,308	238	16,469	11,420	3,731	34,537	66,157
6	Grand Totals, 1905	5,793	2,720	547	2,292	234	16,339	10,507	4,384	36,928	68,158
7	Increases	4	23	.....	16	4	130	913	.....	.....	.....
8	Decreases.....	.....	.....	39	.....	.....	.....	.....	653	2,391	2,001
9	Percentages.....	.....	47.32	8.76	39.81	4.10	24.89	17.26	5.64	52.20	.....

* In addition there were set out 16,825 flowers and plants in the city of Toronto.
† To each school

SCHOOLS—*Continued.*

Houses, Prayers, Etc.

	Maps and Globes.		Examinations. Prizes		Lectures.			Number of Trees planted on Arbor Day.	Number of Schools using authorized Scripture Readings.	Number of Schools opened or closed with Prayer.	Number of Schools using the Bible.	Number of Schools imparting Religious Instruction.
	Number of Maps.	Number of Globes.	Number of Schools holding Public Examinations.	Number of Schools distributing Prizes or Merit Cards.	By Inspector.	By other Persons.	Total.					
1	45,509	4,766	1,831	634	1,228	62	1,290	5,177	2,902	4,973	2,292	1,159
2	6,377	288	45	108	7	68	75	*143	49	178	163	.....
3	3,017	347	49	40	95	39	134	86	98	231	171	20
4	1,768	194	43	16	74	44	118	203	102	143	89	23
5	56,671	5,595	1,968	798	1,404	213	1,617	5,609	3,151	5,525	2,715	1,202
6	55,776	5,209	2,213	794	827	301	1,128	6,177	3,093	5,554	2,704	1,300
7	895	386	.....	4	577	.....	489	.....	58	.....	11	.....
8	.....	.....	245	.....	.....	88	.....	568	.....	29	.....	98
9	†9.77	†.96	33.95	13.46	86.83	13.17	.....	.....	54.35	95.31	46.83	20.73

THE PUBLIC

V.—Table E.—

Counties (including incorporated villages, but not cities or towns), etc.	Receipts. Legislative grants.	Municipal grants and assessments.	Clergy Reserve Fund, balances and other sources.	Total receipts for all Public School purposes.
	$ c.	$ c.	$ c.	$ c.
1 Brant	3,399 95	36,107 48	23,062 36	62,569 79
2 Bruce	9,220 82	93,177 68	45,226 03	147,624 53
3 Carleton	7,764 58	68,510 21	23,996 18	100,270 97
4 Dufferin	4,183 00	52,707 30	18,215 26	75,105 56
5 Dundas	4,341 47	45,063 33	13,411 69	62,816 49
6 Durham	4,349 77	54,172 05	18,852 67	77,374 49
7 Elgin	6,459 60	63,046 24	35,187 07	104,692 91
8 Essex	6,388 56	58,984 77	24,584 32	89,957 65
9 Frontenac	5,818 37	42,040 89	17,837 61	65,696 87
10 Glengarry	3,819 37	34,756 02	13,236 43	51,811 82
11 Grey	11,419 82	116,138 21	61,024 10	188,582 13
12 Haldimand	3,914 25	45,263 62	21,509 54	70,687 41
13 Haliburton	5,656 75	11,603 56	5,692 81	22,953 12
14 Halton	3,660 40	30,900 76	19,041 72	53,602 88
15 Hastings	10,797 81	84,306 99	27,886 70	122,991 50
16 Huron	10,890 38	101,731 22	53,931 49	166,553 09
17 Kent	8,915 18	76,674 48	53,685 71	139,275 37
18 Lambton	8,922 60	90,220 68	43,455 93	142,599 21
19 Lanark	5,134 75	43,719 40	14,985 42	63,839 57
20 Leeds and Grenville	9,641 00	94,533 81	34,223 97	138,398 78
21 Lennox and Addington	4,764 25	36,709 19	15,800 38	57,273 82
22 Lincoln	4,095 25	42,760 60	18,644 03	65,499 88
23 Middlesex	9,604 25	104,139 78	47,432 19	161,176 22
24 Norfolk	4,887 29	52,655 23	30,890 50	88,433 02
25 Northumberland	5,097 50	54,215 15	25,951 18	85,263 83
26 Ontario	7,207 75	65,008 66	26,502 40	98,718 81
27 Oxford	7,111 25	72,353 42	46,627 71	126,092 38
28 Peel	3,611 50	40,581 10	19,351 81	63,544 41
29 Perth	6,041 76	61,549 18	26,843 50	94,434 44
30 Peterborough	6,185 74	47,210 96	13,220 19	66,616 89
31 Prescott and Russell	4,058 98	40,004 97	18,111 09	62,175 04
32 Prince Edward	3,219 76	29,994 83	13,977 46	47,192 05
33 Renfrew	8,342 16	53,779 44	24,910 20	87,031 80
34 Simcoe	13,867 00	120,371 92	53,174 73	187,413 65
35 Stormont	4,196 78	32,512 39	8,009 25	44,718 42
36 Victoria	6,335 11	51,293 97	15,484 75	73,113 83
37 Waterloo	5,576 75	55,663 48	51,053 50	112,293 73
38 Welland	4,640 25	45,447 42	21,867 68	71,955 35
39 Wellington	8,695 60	86,692 87	49,983 96	145,372 43
40 Wentworth	4,988 79	48,775 61	42,360 34	96,124 74
41 York	10,377 82	113,773 35	71,256 32	195,407 49
42 Algoma and Manitoulin	19,714 95	41,784 40	22,320 80	83,820 15
43 Muskoka	14,354 62	23,686 09	12,164 44	50,205 15
44 Nipissing, etc.	12,282 95	26,455 12	20,468 91	59,206 98
45 Parry Sound	16,631 36	36,745 23	12,065 82	65,442 41
46 Rainy River and Thunder Bay	7,676 50	26,126 08	7,408 70	41,211 28
47 Albany	100 00	.....	.....	100 00
Totals	338,364 35	2,653,949 14	1,284,928 85	4,277,242 34
Totals, Incorporated Villages	23,567 97	247,654 36	105,054 90	376,277 23
Totals, Rural Schools	314,796 38	2,406,294 78	1,179,873 95	3,900,965 11

SCHOOLS.—*Continued.*

Financial Statement.

	Expenditure.					
	Teachers' salaries.	Sites, and building school houses.	Libraries, maps, apparatus, prizes and school books.	Rent and repairs, fuel and other expenses.	Total expenditure for all Public School purposes.	Balances.
	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
1	26,332 98	1,003 37	999 79	9,846 88	38,183 02	24,386 77
2	74,907 05	8,583 51	2,758 78	23,529 27	109,778 61	37,845 92
3	56,995 18	6,757 63	1,643 62	19,435 91	84,832 34	15,438 63
4	38,083 89	1,767 53	2,752 85	13,671 22	56,275 49	18,830 07
5	37,165 69	1,410 22	1,185 43	10,411 98	50,173 32	12,643 17
6	41,608 16	2,038 08	585 92	12,288 58	56,520 74	20,853 75
7	48,295 94	5,680 48	2,946 37	17,006 32	73,929 11	30,763 80
8	45,529 44	2,102 42	1,533 46	16,916 42	66,081 74	23,875 91
9	37,767 78	1,893 29	341 44	9,139 51	49,142 02	16,554 85
10	24,950 91	2,622 23	232 98	7,770 65	35,576 77	16,235 05
11	90,775 27	11,504 16	3,323 23	42,791 48	148,394 14	40,187 99
12	33,541 49	4,294 12	1,062 74	10,922 07	49,820 42	20,866 99
13	13,563 20	1,512 52	397 33	3,170 10	18,643 15	4,309 97
14	28,971 34	3,255 85	793 38	11,391 20	44,411 77	9,191 11
15	67,118 68	4,716 92	2,561 90	18,124 03	92,521 53	30,469 97
16	82,119 97	18,532 69	1,606 71	28,329 56	130,588 93	35,964 16
17	59,262 84	4,928 63	1,792 14	20,937 38	86,920 99	52,354 38
18	76,258 25	7,715 33	1,181 23	24,381 08	109,535 89	33,063 32
19	37,151 37	858 16	545 45	8,674 13	47,229 11	16,610 46
20	77,697 90	3,001 86	2,307 97	25,249 65	108,257 38	30,141 40
21	30,558 79	1,755 98	649 79	10,739 67	43,704 23	13,569 59
22	30,764 05	1,346 96	1,178 13	12,545 61	45,834 75	19,665 13
23	76,393 66	5,113 05	1,812 13	25,806 37	109,125 21	52,051 01
24	40,632 90	2,380 98	867 35	10,606 83	54,488 06	33,944 96
25	41,990 57	3,968 83	700 86	14,255 87	60,916 13	24,347 70
26	50,747 00	2,113 64	1,436 14	19,923 75	74,220 53	24,498 28
27	56,862 18	6,427 40	1,813 77	15,463 22	80,566 57	45,525 81
28	31,999 76	2,323 85	534 87	13,893 79	48,752 27	14,792 14
29	47,045 37	5,220 24	1,750 15	16,297 61	70,313 37	24,121 07
30	37,967 32	2,599 69	926 29	10,734 29	52,227 59	14,389 30
31	31,648 62	4,306 20	630 34	10,677 95	47,263 11	14,911 93
32	26,637 64	2,100 46	180 47	7,688 99	36,607 56	10,584 49
33	44,841 09	9,360 17	717 51	11,701 46	66,620 23	20,411 57
34	92,662 88	10,746 93	3,758 94	27,302 74	134,471 49	52,942 16
35	26,991 90	2,138 29	439 79	7,709 01	37,278 99	7,439 43
36	42,414 15	1,671 31	963 81	12,848 61	57,897 88	15,215 95
37	45,793 52	4,323 83	1,290 78	14,797 58	66,205 71	46,088 03
38	37,324 26	2,236 22	784 19	8,990 91	49,335 58	22,619 77
39	69,291 28	3,756 19	1,969 46	29,621 58	104,638 51	40,733 92
40	36,630 04	10,211 98	1,041 60	14,182 12	62,065 74	34,059 00
41	85,164 18	12,525 92	2,632 97	39,503 58	139,826 65	55,580 84
42	41,283 53	8,040 70	1,148 63	15,221 96	65,694 82	18,125 33
43	26,503 38	2,157 78	1,239 92	11,484 33	41,385 41	8,819 74
44	26,020 36	9,673 35	1,323 00	13,824 86	50,841 57	8,365 41
45	37,894 04	2,649 36	1,074 18	14,360 01	55,977 59	9,464 82
46	20,754 47	4,320 87	936 78	10,247 44	36,259 56	4,951 72
47	100 00	.....	.....	.....	100 00	.....
	2,135,014 27	217,649 18	62,354 57	734,417 56	3,149,435 58	1,127,806 76
	209,041 78	21,275 40	5,189 32	79,959 01	315,465 51	60,811 72
	1,925,972 49	196,373 78	57,165 25	654,458 55	2,833,970 07	1,066,995 04

THE PUBLIC

V.—Table E.—

Cities.	Receipts. Legislative grants.	Municipal grants and assessments.	Clergy Reserve Fund, balances and other sources.	Total receipts for all Public School purposes.
	$ c.	$ c.	$ c.	$ c.
1 Belleville	896 00	13,180 88	1,177 73	15,254 61
2 Brantford	2,473 14	43,000 00	10,407 63	55,880 77
3 Chatham	1,332 67	32,767 40	1,838 11	35,938 18
4 Guelph	2,260 96	22,655 14	120 00	25,036 10
5 Hamilton	*7,722 49	135,780 00	12,598 00	156,100 49
6 Kingston	2,233 52	29,265 00	2,589 50	34,088 02
7 London	†7,073 18	107,774 39	5,015 12	119,862 69
8 Niagara Falls	895 00	12,000 00	317 50	13,212 50
9 Ottawa	*7,106 20	168,658 54	20,204 89	195,969 63
10 Peterborough	1,458 93	25,500 00	28,547 02	55,505 95
11 St. Catharines	1,208 40	15,880 60	921 38	18,010 38
12 St. Thomas	*1,981 00	25,504 66	1,385 57	28,871 23
13 Stratford	*1,947 81	23,000 00	2,926 25	27,874 06
14 Toronto	*36,641 65	997,435 00	37,519 49	1,071,596 14
15 Windsor	1,489 00	28,191 00	1,447 56	31,127 56
16 Woodstock	*1,593 00	16,300 00	1,882 36	19,775 36
Totals	78,312 95	1,696,892 61	128,898 11	1,904,103 67
Towns.				
1 Alexandria	36 00	910 51	815 96	1,762 47
2 Alliston	446 00	3,200 00	4,071 74	7,717 74
3 Almonte	277 00	3,974 87	958 64	5,210 51
4 Amherstburg	421 00	4,100 00	3,952 67	8,473 67
5 Arnprior	284 00	4,876 52	2,135 84	7,296 36
6 Aurora	193 00	3,800 00	122 27	4,115 27
7 Aylmer	275 60	4,661 73	596 95	5,534 28
8 Barrie	837 00	13,159 55	24,868 91	38,865 46
9 Berlin	1,484 56	24,224 48	160 87	25,869 91
10 Blenheim	180 00	4,470 00	426 79	5,376 79
11 Blind River	45 00	7,537 99	564 40	8,147 39
12 Bonfield	100 00	485 03	262 72	847 75
13 Bothwell	407 00	2,308 50	217 00	2,932 50
14 Bowmanville	329 00	4,850 00	31 25	5,210 25
15 Bracebridge	1,244 00	8,307 60	353 82	9,905 42
16 Brampton	465 00	5,200 00	981 22	6,646 22
17 Brockville	1,593 16	15,600 00	1,064 52	18,257 68
18 Bruce Mines	384 00	2,279 00	358 41	3,021 41
19‡Cache Bay	85 00	145 76	2,068 20	2,298 96
20 Campbellford	298 00	5,970 73	125 92	6,394 65
21 Carleton Place	169 00	6,500 00	140 48	7,109 48
22 Chesley	238 00	2,500 00	725 70	3,463 70
23 Clinton	398 00	3,500 00	568 55	4,466 55
24 Cobourg	376 45	6,850 00	3 85	7,230 30
25 Collingwood	815 00	15,500 00	759 71	17,074 71
26 Copper Cliff	284 00	3,837 75	1,108 52	5,230 27
27 Cornwall	738 00	6,650 00	1,071 05	8,459 05
28 Deseronto	389 00	5,521 58	218 50	6,129 08
29 Dresden	507 00	3,000 00	537 47	4,044 47
30 Dundas	329 00	5,100 00	306 99	5,735 99
31 Dunnville	277 00	4,375 00	129 38	4,781 38
32 Durham	813 00	4,866 99	760 90	6,440 89

* Grant for Technical Education included. † Including grant to Normal School.
‡ Statistics of preceding year except Legislative grant.

SCHOOLS.—*Continued.*

Financial Statement.—*Continued.*

	Expenditure.					
	Teachers' salaries.	Sites, and building school houses.	Libraries, maps, apparatus, prizes and school books.	Rent and repairs, fuel and other expenses.	Total expenditure for all Public School purposes.	Balances.
	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
1	9,441 82	.....	.....	3,459 95	12,901 77	2,352 84
2	21,528 29	17,688 75	1,843 87	11,177 50	55,238 41	642 36
3	15,908 88	13,063 07	.....	6,927 05	35,899 00	39 18
4	17,106 31	.....	182 46	7,747 33	25,036 10	.....
5	87,131 35	5,818 68	7,293 57	49,425 04	149,668 64	6,431 85
6	23,109 55	.....	1,312 43	8,618 87	33,040 85	1,047 17
7	81,498 44	6,924 62	101 10	28,677 26	117,201 42	2,661 27
8	8,553 90	.....	84 17	4,281 89	12,919 06	293 44
9	93,675 01	35,180 68	4,890 73	54,106 87	187,853 29	8,116 34
10	19,040 57	24,500 05	....	11,015 08	54,555 70	950 25
11	10,334 64	... .	84 63	7,310 88	17,730 15	280 23
12	18,868 11	.....	339 31	7,014 93	26,222 35	2,648 88
13	15,540 69	799 10	1,560 20	9,093 80	26,993 79	880 27
14	490,091 11	159,681 06	4,271 64	196,159 95	850,203 76	221,392 38
15	21,616 89	.....	162 40	8,311 87	30,091 16	1,036 40
16	13,218 32	.....	1,013 51	5,395 73	19,627 56	147 80
	949,662 98	263,656 01	23,140 02	418,724 00	1,655,183 01	248,920 66
1	792 50	.....	.....	969 97	1,762 47	.....
2	2,947 25	2,086 65	.....	2,411 64	7,445 54	272 20
3	3,735 00	.....	4 50	1,358 46	5,097 96	112 55
4	3,438 10	572 28	12 25	4,330 63	8,353 26	120 41
5	3,780 78	.....	.....	1,315 03	5,095 81	2,200 55
6	2,491 50	.....	17 23	1,538 62	4,047 35	67 92
7	3,361 00	719 66	47 15	1,406 47	5,534 28	.....
8	10,088 63	18,271 91	149 15	3,000 44	31,510 13	7,355 33
9	16,986 25	.....	1,080 17	7,238 79	25,305 21	564 70
10	3,595 40	429 13	46 40	655 61	4,726 54	650 25
11	2,272 50	4,497 16	.....	1,377 73	8,147 39	.....
12	453 00	.....	.....	53 00	506 00	341 75
13	1,993 62	.....	4 08	908 77	2,906 47	26 03
14	3,850 00	....	.....	1,359 16	5,209 16	1 09
15	5,461 60	768 80	4 55	3,075 72	9,310 67	594 75
16	4,656 30	27 50	73 00	1,125 87	5,882 67	763 55
17	10,238 67	270 00	40 00	5,529 86	16,078 53	2,179 15
18	1,875 00	.....	290 38	703 81	2,869 19	152 22
19	757 64	.....	....	1,531 32	2,288 96	10 00
20	3,586 66	.....	.....	2,500 09	6,086 75	307 90
21	5,028 20	.....	.....	2,067 06	7,095 26	14 22
22	1,983 50	.....	.....	1,347 94	3,331 44	132 26
23	3,393 63	.....	5 00	948 39	4,347 02	119 53
24	4,779 00	....	.....	1,911 23	6,690 23	540 07
25	9,804 04	50 00	353 36	6,054 74	16,262 14	812 57
26	2,990 40	.....	19 05	1,484 12	4,493 57	736 70
27	5,552 71	366 66	.....	2,539 68	8,459 05	.....
28	4,286 50	.....	.....	1,531 02	5,817 52	311 56
29	3,354 18	.....	65 15	481 00	3,900 33	144 14
30	4,341 86	.....	.....	1,352 00	5,693 86	42 13
31	3,024 34	573 61	136 65	879 25	4,613 85	167 53
32	4,069 06	.....	58 67	1,733 34	5,861 07	579 82

Towns.—*Continued.*	Receipts.			
	Legislative grants.	Municipal grants and assessments.	Clergy Reserve Fund, balances and other sources.	Total receipts for all Public School purposes.
	$ c.	$ c.	$ c.	$ c.
33 East Toronto	379 60	7,538 99	27,753 25	35,671 24
34 Essex	170 00	3,663 49	1,960 34	5,793 83
35 Forest	340 00	2,900 00	529 10	3,769 10
36 Fort Frances	369 00	3,493 61	282 48	4,145 09
37 Fort William	706 00	12,294 00	1,126 36	14,126 36
38 Galt	973 32	23,000 00	453 24	24,426 56
39 Gananoque	603 00	7,739 04	301 89	8,643 93
40 Goderich	600 00	5,809 59	393 00	6,802 59
41 Gore Bay	1,296 00	1,834 00	540 15	3,670 15
42 Gravenhurst	294 00	4,610 00	97 30	5,001 30
43 Haileybury	55 00	600 00	2,610 53	3,265 53
44 Hanover	390 00	261 78	4,228 11	4,879 89
45 Harriston	205 00	2,291 99	296 54	2,793 53
46 Hawkesbury	59 00	2,126 83	925 75	3,111 58
47 Hespeler	316 82	4,824 00	327 43	5,468 25
48 Huntsville	566 00	5,622 36	982 64	7,171 00
49 Ingersoll	602 87	7,047 61	698 53	8,349 01
50 Kincardine	433 00	4,150 00	177 54	4,760 54
51 Kingsville	260 00	3,919 55	122 67	4,302 22
52 Kenora	448 00	12,650 00	171 67	13,269 67
53 Leamington	323 00	4,100 00	63 54	4,486 54
54 Lindsay	775 00	13,004 52	348 00	14,127 52
55 Listowel	268 45	4,753 00	30 95	5,052 40
56 Little Current	161 00	2,025 00	1,089 57	3,275 57
57 Massey	38 00	1,429 00	314 06	1,781 06
58 Mattawa	27 00	1,200 00	21 22	1,248 22
59 Meaford	395 00	4,350 00	314 98	5,059 98
60 Midland	457 00	7,893 00	190 89	8,540 89
61 Milton	635 00	2,760 99	1,100 82	4,496 81
62 Mitchell	226 00	3,924 00	109 14	4,259 14
63 Mount Forest	384 00	3,952 00	425 82	4,761 82
64 Napanee	552 00	5,150 00	478 57	6,180 57
65 New Liskeard	114 00	4,180 00	11,447 93	15,741 93
66 Newmarket	429 00	4,375 00	1,490 57	6,294 57
67 Niagara	169 00	1,800 00	165 53	2,134 53
68 North Bay	292 00	14,820 17	1,935 45	17,047 62
69 North Toronto	402 25	6,406 22	245 63	7,054 10
70 Oakville	191 00	4,119 15	247 68	4,557 83
71 Orangeville	468 00	5,308 00	206 84	5,982 84
72 Orillia	461 00	11,000 00	7,536 36	18,997 36
73 Oshawa	545 00	7,500 00	6,197 31	14,242 31
74 Owen Sound	1,343 78	17,628 00	723 04	19,694 82
75 Palmerston	540 00	3,200 00	668 66	4,408 66
76 Paris	388 00	5,400 00	157 37	5,945 37
77 Parkhill	147 00	2,426 00	325 43	2,898 43
78 Parry Sound	1,137 00	8,112 50	575 54	9,825 04
79 Pembroke	385 00	7,948 93	682 06	9,015 99
80*Penetanguishene	614 00	4,432 32	306 28	5,352 60
81 Perth	417 00	4,057 43	1,350 66	5,825 09
82 Petrolea	471 00	7,750 00	1,294 12	9,515 12
83 Picton	575 16	5,000 00	7,083 85	12,659 01
84 Port Arthur	924 00	29,504 02	1,919 87	32,347 89
85 Port Hope	666 00	7,530 00	397 50	8,593 50

* Including Protestant Separate School.

SCHOOLS.—*Continued.*

Financial Statement.—*Continued.*

	Expenditure.					
	Teachers' salaries.	Sites, and building school houses.	Libraries, maps, apparatus, prizes and school books.	Rent and repairs, fuel and other expenses.	Total expenditure for all Public School purposes.	Balances.
	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
33	6,033 58	21,732 60	188 04	2,806 79	30,761 01	4,910 23
34	2,548 74	1,626 00	56 10	1,511 42	5,742 26	51 57
35	2,470 50	279 90	.....	572 94	3,323 34	445 76
36	2,752 82	.....	246 41	902 56	3,901 79	243 30
37	8,120 48	.....	45 00	3,804 42	11,969 90	2,156 46
38	12,047 13	6,760 09	30 42	4,610 38	23,448 02	978 54
39	5,189 68	.....	48 72	1,586 65	6,825 05	1,818 88
40	4,852 96	.....	110 00	1,839 63	6,802 59	.....
41	2,636 25	.....	159 45	484 75	3,280 45	389 70
42	3,465 55	376 36	22 20	972 20	4,836 31	164 99
43	892 50	723 00	25 55	1,491 13	3,132 18	133 35
44	2,860 29	320 45	265 56	1,310 03	4,756 33	123 56
45	2,119 85	.....	6 25	665 36	2,791 46	2 07
46	1,330 50	.....	16 00	315 42	1,661 92	1,449 66
47	3,845 45	65 45	59 60	1,019 59	4,990 09	478 16
48	3,724 72	1,643 13	118 30	1,047 48	6,533 63	637 37
49	6,041 10	.....	77 54	2,226 34	8,344 98	4 03
50	3,393 85	.....	.....	1,352 50	4,746 35	14 19
51	2,936 75	.....	.....	943 59	3,880 34	421 88
52	9,040 60	84 67	325 40	3,795 65	13,246 32	23 35
53	3,398 82	.....	125 83	899 22	4,423 87	62 67
54	10,064 84	.....	.....	3,856 04	13,920 88	206 64
55	3,678 57	.....	77 96	1,206 01	4,962 54	89 86
56	1,492 50	.....	.....	1,149 91	2,642 41	633 16
57	850 00	500 00	62 38	299 53	1,711 91	69 15
58	884 00	.....	.....	259 34	1,143 34	104 88
59	4,517 85	.....	76 27	444 85	5,038 97	21 01
60	6,819 75	.....	229 31	1,298 43	8,347 49	193 40
61	3,290 60	.....	98 59	513 88	3,902 47	594 34
62	2,875 00	656 08	29 65	638 89	4,199 62	59 52
63	3,168 50	.....	.....	1,590 21	4,758 71	3 11
64	4,387 58	.....	.....	1,452 56	5,840 14	340 43
65	2,448 83	11,339 16	706 50	1,126 31	15,620 80	121 13
66	3,391 50	.....	12 00	1,422 79	4,826 29	1,468 28
67	1,416 64	.....	.....	628 19	2,044 83	89 70
68	4,682 60	4,280 00	.....	5,398 87	14,361 47	2,686 15
69	4,903 90	357 20	283 14	1,457 46	7,001 70	52 40
70	2,470 00	80 01	417 75	1,206 92	4,174 68	383 15
71	4,210 12	.....	.....	1,682 43	5,892 55	90 29
72	7,709 70	363 80	93 08	2,667 97	10,834 55	8,162 81
73	6,184 00	2,500 00	177 95	5,380 36	14,242 31	.....
74	14,216 54	.....	13 85	3,668 00	17,898 39	1,796 43
75	3,346 13	.....	.....	969 74	4,315 87	92 79
76	4,205 00	.....	.....	1,433 60	5,638 60	306 77
77	1,652 50	.....	.....	476 99	2,129 49	768 94
78	6,655 50	.....	54 01	1,923 03	8,632 54	1,192 50
79	4,606 37	2,884 01	205 80	1,319 81	9,015 99	.....
80	3,784 16	276 55	.....	1,105 12	5,165 83	186 77
81	3,745 55	916 80	.....	1,162 74	5,825 09	.....
82	5,895 00	.....	.....	2,154 74	8,049 74	1,465 38
83	4,331 58	.....	107 92	4,297 27	8,736 77	3,922 24
84	9,076 04	16,707 84	1,714 12	4,849 89	32,347 89	.....
85	6,555 61	.....	38 50	1,999 39	8,593 50	.....

THE PUBLIC

V.—Table E.—

Towns.—*Con.*	Receipts. Legislative grants.	Municipal grants and assessments.	Clergy Reserve Fund, balances and other sources.	Total receipts for all Public School purposes.
	$ c.	$ c.	$ c.	$ c.
86 Powassan	222 00	2,100 00	403 55	2,725 55
87 Prescott	446 00	4,200 00	121 77	4,767 77
88 Preston	273 89	4,800 00	56 29	5,130 18
89 Rainy River	141 00	2,372 00	1,840 35	4,353 35
90 Renfrew	365 00	5,458 10	2,120 00	7,943 10
91 Ridgetown	264 00	3,587 06	29 43	3,880 49
92 St. Mary's	411 00	5,192 55	161 75	5,765 30
93 Sandwich	110 00	1,700 00	283 74	2,093 74
94 Sarnia	1,057 00	19,243 30	1,216 93	21,517 23
95 Sault Ste. Marie	1,001 00	50,999 00	1,529 77	53,529 77
96 Seaforth	210 00	3,400 00	108 76	3,718 76
97 Simcoe	535 45	5,031 71	108 81	5,675 97
98 Smith's Falls	688 00	12,517 07	.....	13,205 07
99*Southampton	366 00	3,700 00	158 20	4,224 20
100 Stayner	439 00	2,780 84	389 91	3,609 75
101 Steelton	179 00	5,851 00	886 02	6,916 02
102 Strathroy	492 00	4,390 00	365 89	5,247 89
103 Sturgeon Falls	182 00	3,480 00	12,563 00	16,225 00
104 Sudbury	446 00	4,095 53	28,191 26	32,732 79
105 Thessalon	280 00	2,500 00	277 26	3,057 26
106 Thornbury	132 50	2,214 87	31 11	2,378 48
107 Thorold	180 00	3,285 00	40 77	3,505 77
108 Tillsonburg	282 16	4,012 40	975 41	5,269 97
109 Toronto Junction	1,390 21	26,105 00	745 32	28,240 53
110 Trenton	363 00	6,553 12	2,949 97	9,866 09
111 Uxbridge	194 00	2,991 56	70 32	3,255 88
112 Vankleek Hill	221 00	4,859 00	336 57	5,416 57
113 Walkerton	392 00	4,136 72	259 78	4,788 50
114 Walkerville	336 00	12,000 00	17,743 07	30,079 07
115 Wallaceburg	607 00	6,000 00	281 23	6,888 23
116 Waterloo	411 75	7,625 83	187 62	8,225 20
117 Webbwood	95 00	1,850 00	266 36	2,211 36
118 Welland	379 45	2,600 00	2,698 02	5,677 47
119 Whitby	383 00	4,350 00	350 25	5,083 25
120 Wiarton	298 00	3,602 00	338 81	4,238 81
121 Wingham	562 00	4,859 00	235 45	5,656 45
Totals	53,639 83	766,122 34	222,215 71	1,041,977 88
Totals.				
1 Rural Schools	314,796 38	2,406,294 78	1,179,873 95	3,900,965 11
2 Cities	78,312 95	1,696,892 61	128,898 11	1,904,103 67
3 Towns	53,639 83	766,122 34	222,215 71	1,041,977 88
4 Incorporated Villages	23,567 97	247,654 36	105,054 90	376,277 23
5 Grand totals, 1906	470,317 13	5,116,964 09	1,636,042 67	7,223,323 89
6 Grand totals, 1905	380,463 00	4,549,672 81	1,605,067 39	6,535,203 20
7 Increases	89,854 13	567,291 28	30,975 28	688,120 69
8 Decreases	.....	.....	.....	.....
9 Percentages	6.51	70.84	22.65	.....

Cost per pupil, enrolled attendance: Rural schools, $12.19; Cities, $22.52

* Statistics of preceding year except Legislative grant.

SCHOOLS.—*Concluded.*

Financial Statement.—*Concluded.*

	Expenditure.					
	Teachers' salaries.	Sites, and building school houses.	Libraries, maps, apparatus, prizes and school books.	Rent and repairs, fuel and other expenses.	Total expenditure for all Public School purposes.	Balances.
	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
86	1,625 00	80 64	48 42	839 67	2,592 73	131 82
87	3,462 84	.....	37 96	1,206 41	4,707 21	60 56
88	3,660 34	.....	.....	1,034 00	4,694 34	435 84
89	2,225 00	30 00	124 50	1,839 23	4,218 73	134 62
90	4,187 50	493 76	.....	2,878 90	7,560 16	382 94
91	2,902 75	.....	6 75	847 70	3,757 20	123 29
92	4,072 87	8 40	.....	1,419 65	5,500 92	264 38
93	1,228 10	.....	50 00	432 36	1,710 46	383 28
94	11,835 42	3,756 09	174 12	4,221 99	19,987 62	1,529 61
95	10,491 66	36,143 62	1,641 68	4,354 73	52,631 69	898 08
96	2,579 15	.....	.....	1,080 53	3,659 68	59 08
87	4,491 75	2 45	119 57	934 21	5,547 98	127 99
98	7,058 70	3,459 62	62 16	2,146 55	12,727 03	478 04
99	3,214 85	.....	.....	736 15	3,951 00	273 20
100	2,575 00	482 27	35 40	516 06	3,608 73	1 02
101	3,861 59	809 30	213 02	1,786 75	6,670 66	245 36
102	4,067 01	.....	37 50	1,032 76	5,137 27	110 62
103	2,730 00	8,290 40	114 78	5,083 59	16,218 77	6 23
104	2,772 10	23,413 68	198 17	2,252 39	28,636 34	4,096 45
105	2,050 55	.....	.....	563 40	2,613 95	443 31
106	1,550 00	.....	42 00	785 33	2,377 33	1 15
107	2,515 14	.....	.....	974 16	3,489 30	16 47
108	3,783 50	.....	75 00	993 87	4,852 37	417 60
109	18,391 25	800 00	81 48	7,350 28	26,623 01	1,617 52
110	3,825 81	452 29	53 03	4,853 09	9,184 22	681 87
111	2,587 50	.....	.....	589 48	3,176 98	78 90
112	2,024 55	.....	118 99	545 88	2,689 42	2,727 15
113	3,759 92	.....	.....	986 05	4,745 97	42 53
114	5,503 16	17,577 90	400 00	4,753 07	28,234 13	1,844 94
115	4,679 12	436 00	155 21	1,245 47	6,515 80	372 43
116	6,071 51	.....	178 48	1,846 23	8,096 22	128 98
117	1,097 50	602 47	120 20	195 83	2,016 00	195 36
118	2,685 50	.....	.....	796 91	3,482 41	2,195 06
119	3,808 33	.....	35 00	1,010 30	4,853 63	229 62
120	3,556 01	.....	7 50	615 50	4,179 01	59 80
121	3,576 65	.....	.....	1,535 86	5,112 51	543 94
	526,694 43	199,945 35	12,862 81	222,204 42	961,707 01	80,270 87
1	1,925,972 49	196,373 78	57,165 25	654,458 55	2,833,970 07	1,066,995 04
2	949,662 98	263,656 01	23,140 02	418,724 00	1,655,183 01	248,920 66
3	526,694 43	199,945 35	12,862 81	222,204 42	961,707 01	80,270 87
4	209,041 78	21,275 40	5,189 32	79,959 01	315,465 51	60,811 72
5	3,611,371 68	681,250 54	98,357 40	1,375,345 98	5,766,325 60	1,456,998 29
6	3,422,323 76	715,760 97	84,351 82	1,301,665 52	5,524,102 07	1,011,101 13
7	189,047 92	.....	14,005 58	73,680 46	242,223 53	445,897 16
8	.....	34,510 43	.....	.....	.....	.....
9	62.63	11.81	1.71	23.85	.....	.....

Towns, $14.50; Villages, $12.08; Province, $14.48.

ROMAN CATHOLIC

I.—Table F.—Financial Statement,

Counties, (including Incorporated villages, but not cities or towns), etc.	Number of Schools.	Receipts.				Expendi-
		Legislative grants.	Municipal grants and assessments.	Balances, subscribed and other sources.	Total amount received.	Teachers' salaries.
		$ c.	$ c.	$ c.	$ c.	$ c.
1 Bruce	8	636 00	5,835 53	3,366 91	9,838 44	4,291 43
2 Carleton	19	1,417 50	14,803 43	11,348 57	27,569 50	6,264 81
3 Essex	27	1,772 64	15,155 78	6,546 35	23,474 77	12,428 79
4 Frontenac	12	477 50	3,285 70	1,159 50	4,922 70	3,098 00
5 Grey	7	176 00	3,101 07	2,247 91	5,524 98	2,141 00
6 Hastings	8	368 00	2,808 66	666 96	3,843 62	2,376 40
7 Huron	9	453 17	4,775 61	2,091 46	7,320 24	3,439 92
8 Kent	10	472 00	4,953 34	1,814 07	7,239 41	3,771 82
9 Lambton	2	49 00	730 00	145 29	924 29	600 00
10 Lanark	3	214 00	665 25	131 55	1,010 80	770 00
11 Leeds and Grenville	6	375 00	1,721 16	723 31	2,819 47	1,639 60
12 Lennox and Addington	2	121 00	631 49	90 22	842 71	562 65
13 Lincoln	2	73 00	1,116 46	308 64	1,498 10	800 00
14 Middlesex	6	155 45	2,207 54	649 03	3,012 02	1,787 11
15 Norfolk	1	83 00	807 90	1,616 86	2,507 76	400 00
16 Northumberland	7	406 50	2,301 95	1,177 63	3,886 08	1,932 14
17 Ontario	1	76 00	344 23	1,002 95	1,423 18	689 15
18 Peel	1	60 00	193 11	58 03	311 14	250 00
19 Perth	8	313 50	3,022 22	2,062 91	5,398 63	2,634 24
20 Peterborough	1	30 00	310 00	74 91	414 91	274 50
21 Prescott and Russell	78	4,178 72	32,554 10	15,671 29	52,404 11	24,471 75
22 Renfrew	12	1,233 50	10,503 37	3,217 50	14,954 37	4,321 00
23 Simcoe	2	255 50	1,327 81	127 34	1,710 65	1,155 00
24 Stormont, Dundas and Glengarry	13	1,028 50	5,372 00	1,506 48	7,906 98	5,078 20
25 Victoria	2	89 00	965 03	197 56	1,251 59	815 00
26 Waterloo	7	417 50	5,391 30	3,037 81	8,879 61	3,035 00
27 Wellington	9	282 00	4,213 71	3,339 92	7,835 63	3,010 00
28 York	2	86 00	829 65	297 12	1,212 77	720 00
29 Districts	28	3,565 00	7,565 67	3,389 97	14,520 64	6,396 54
Totals	293	18,894 98	137,496 07	68,068 05	224 459 10	99,694 05
Totals, Incorporated Villages	22	1,504 00	30,293 69	6,231 42	38,029 11	12,329 96
Totals, Rural Schools	271	17,390 98	107,202 38	61,836 63	186,429 99	87,364 09
Cities.						
1 Belleville	2	230 00	1,951 61	294 22	2,475 83	1,175 00
2 Brantford	2	278 00	2,241 72	1,237,70	3,757 42	1,412 25
3 Chatham	1	205 00	3,034 93	253 43	3,493 36	1,399 92
4 Guelph	3	284 00	3,662 45	300 57	4,247 02	2,375 00
5 Hamilton	8	1,206 00	12,000 00	1,596 95	14,802 95	8,153 00
6 Kingston	4	543 00	6,086 58	2,382 95	9,012 53	4,628 80
7 London	7	695 00	9,056 55	265 05	10,016 60	4,550 00
8 Niagara Falls	1	104 00	1,440 90	575 26	2,120 16	600 00
9 Ottawa	26	4,120 00	60,000 00	126,784 41	190,904 41	44,059 73
10 Peterborough	3	506 00	6,153 00	666 11	7,325 11	4,722 45
11 St. Catharines	3	270 00	4,305 04	67 97	4,643 01	2,077 00
12 St. Thomas	1	171 00	2,475 51	214 22	2,860 73	1,175 00
13 Stratford	1	290 00	3,408 56	373 53	4,072 09	1,633 34
14 Toronto	19	4,075 00	58,124 36	3,270 64	65,470 00	23,812 50
15 Windsor	2	548 00	8,045 64	.....	8,593 64	6,845 00
16 Woodstock	1	56 00	600 00	344 00	1,000 00	650 00
Totals	84	13,581 00	182,586 85	138,627 01	334,794 86	109,268 99

SEPARATE SCHOOLS.

Teachers, etc.

	ture.					Teachers.				
	Sites, and building school houses.	Libraries, maps, apparatus, prizes and school books.	All other purposes.	Total amount expended.	Balances.	Number of Teachers.	Male.	Female.	Average salary, male.	Average salary, female (in addition members of Religious Orders received free residence).
	$ c.	$ c.	$ c.	$ c.	$ c.					
1	1,754 09	405 00	1,319 28	7,769 80	2,068 64	16	3	13	417	226
2	18,015 51	205 16	2,305 79	26,791 27	778 23	33	.....	33	.....	211
3	3,291 95	199 93	4,960 66	20,881 33	2,593 44	38	7	31	410	282
4	236 16	23 25	800 72	4,158 13	764 57	12	1	11	250	268
5	2,287 86	8 00	412 83	4,849 69	675 29	7	.....	7	.....	261
6	292 15	32 28	470 94	3,171 77	671 85	9	.....	9	.....	298
7	1,086 37	124 50	1,407 23	6,058 02	1,262 22	10	.....	10	.....	321
8	444 89	155 67	1,148 41	5,520 79	1,718 62	13	4	9	406	270
9	.....	76 22	88 57	764 79	159 50	2	.....	2	.....	300
10	5 80	2 23	97 20	875 23	135 57	3	.....	3	.....	257
11	428 38	34 00	320 82	2,422 80	396 67	9	.....	9	.....	215
12	59 00	31 51	74 65	727 81	114 90	2	.....	2	.....	297
13	308 00	.....	288 87	1,396 87	101 23	4	.....	4	.....	200
14	18 00	21 24	791 21	2,617 56	394 46	6	1	5	300	298
15	1,023 29	11 00	93 60	1,827 89	979 87	1	.....	1	.....	400
16	185 90	3 25	1,190 15	3,311 41	574 64	7	.....	7	.....	306
17	.....	.....	565 60	1,254 75	168 43	1	1	.....	600	.....
18	.....	.....	18 90	268 90	42 24	1	.....	1	.....	250
19	487 75	48 60	1,383 71	4,554 30	844 33	8	.....	8	.....	325
20	65 55	.....	41 78	381 83	33 08	1	.....	1	.....	275
21	10,298 07	709 18	5,601 61	41,080 61	11,323 50	107	7	100	319	235
22	7,037 30	243 57	1,041 04	12,642 91	2,311 46	16	1	15	90	273
23	9 00	93 29	319 71	1,577 00	133 65	4	1	3	450	235
24	862 67	68 14	799 26	6,808 27	1,098 71	19	2	17	362	261
25	119 83	26 60	127 49	1,088 92	162 67	2	1	1	390	425
26	306 33	135 76	3,278 54	6,755 63	2,123 98	12	1	11	400	248
27	2,783 69	105 75	978 63	6,878 07	957 56	11	.....	11	.....	280
28	.....	14 13	191 41	925 54	287 23	3	.....	3	.....	241
29	2,546 14	111 75	2,207 06	11,801 49	2,719 15	31	3	28	313	261
	53,953 68	2,890 01	32,325 67	188,863 41	35,595 69	388	33	355	367	255
	19,753 02	352 29	4,770 61	37,205 88	823 23	57	.....	57	.....	229
	34,200 66	2,537 72	27,555 06	151,657 53	34,772 46	331	33	298	367	260
1	135 00	.....	831 57	2,141 57	334 26	6	.....	6	.....	217
2	421 57	.....	1,712 36	3,546 18	211 24	6	.....	6	.....	235
3	520 45	15 96	614 60	2,550 93	942 43	7	.....	7	.....	200
4	.....	198 50	1,375 75	3,899 25	347 77	8	.....	8	.....	237
5	2,931 70	1,035 21	2,614 69	14,734 60	68 35	36	.....	36	.....	200
6	1,911 68	.....	1,636 62	8,177 10	835 43	13	1	12	700	298
7	1,176 00	500 00	3,125 22	9,351 22	665 38	21	.....	21	.....	217
8	100 00	28 11	400 00	1,128 11	992 05	3	.....	3	.....	200
9	72,023 04	2,051 43	72,770 21	190,904 41	.....	128	44	84	396	281
10	57 25	.....	1,829 70	6,609 40	715 71	17	1	16	700	263
11	1,182 50	1 90	1,361 59	4,622 99	20 02	9	1	8	600	180
12	372 10	30 00	1,119 11	2,696 21	164 52	5	.....	5	.....	200
13	681 50	33 23	1,617 39	3,965 46	106 63	7	.....	7	.....	233
14	15,191 37	817 25	25,648 88	65,470 00	.....	106	27	79	323	201
15	845 64	303 00	600 00	8,593 64	.....	16	.....	16	.....	375
16	.....	50 00	300 00	1,000 00	.....	2	.....	2	.....	325
	97,549 80	5,064 59	117,507 69	329,391 07	5,403 79	390	74	316	381	242

ROMAN CATHOLIC

I.—Table F.—Financial

Towns.	Number of Schools.	Receipts.				Expenditure.
		Legislative grants.	Municipal grants and assessments.	Balances, subscribed and other sources.	Total amount received.	Teachers salaries.
		$ c.	$ c.	$ c.	$ c.	$ c.
1 Alexandria	2	232 00	3,039 84	1,880 06	5,151 90	1,925 00
2 Almonte	1	69 00	1,040 99	193 89	1,303 88	970 00
3 Amherstburg	3	290 00	3,927 75	1,340 16	5,557 91	2,000 60
4 Arnprior	2	178 00	2,800 00	519 22	3,497 22	1,734 47
5 Barrie	1	104 00	1,954 38	1,124 76	3,183 14	900 00
6 Berlin	1	333 00	4,549 03	25 09	4,907 12	2,100 00
7 Bonfield	1	200 00	1,241 76	1,294 04	2,735 80	1,008 75
8 Brockville	1	266 00	2,505 16	787 01	3,558 17	1,887 00
9 Cobourg	1	150 00	1,100 00	20 34	1,270 34	900 00
10 Cornwall	3	406 00	5,284 10	807 63	6,497 73	4,094 63
11 Dundas	1	73 00	829 43	205 76	1,108 19	600 00
12 Fort Frances	1	23 90	366 76	420 75	810 51	420 00
13 Fort William	1	204 00	1,964 91	1,568 50	3,737 41	1,200 00
14 Galt	1	68 00	673 76	114 88	856 64	400 00
15 Goderich	1	58 00	481 08	99 72	638 80	450 00
16 Hawkesbury	3	479 00	4,000 00	590 35	5,069 35	2,820 00
17 Ingersoll	1	53 00	875 95	40 74	969 69	575 00
18 Kenora	2	94 00	1,300 00	581 70	1,975 70	1,020 00
19 Lindsay	2	216 00	2,798 95	51 50	3,066 45	2,337 24
20 Massey	1	30 00	625 00	447 28	1,102 28	720 00
21 Mattawa	1	219 00	4,090 22	193 83	4,503 05	2,208 42
22 Mount Forest	1	34 00	474 55	1,315 00	1,823 55	725 00
23 Newmarket	1	28 00	335 73	203 66	567 39	308 34
24 North Bay	1	159 00	5,000 00	.....	5,159 00	1,891 17
25 Oakville	1	20 00	278 98	70 98	369 96	300 00
26 Orillia	1	122 00	1,864 43	1,875 35	3,861 78	1,200 00
27 Oshawa	1	60 00	374 27	109 91	544 18	419 00
28 Owen Sound	1	78 00	1,216 79	1,751 69	3,046 48	568 00
29 Paris	1	48 00	504 40	497 82	1,050 22	400 00
30 Parkhill	1	30 00	200 00	228 96	458 96	300 00
31 Pembroke	1	251 00	3,302 61	580 45	4,134 06	2,535 00
32 Perth	1	128 00	1,100 50	302 62	1,531 12	875 00
33 Picton	1	37 00	550 00	597 86	1,184 86	420 00
34 Port Arthur	1	195 00	2,737 83	1,721 65	4,654 48	1,200 00
35 Prescott	1	110 00	1,504 29	1,849 97	3,464 26	1,127 03
36 Preston	1	67 00	802 24	605 62	1,474 86	676 35
37 Rainy River	1	28 00	1,000 00	2,635 99	3,663 99	605 00
38 Renfrew	2	163 00	1,902 66	828 82	2,894 48	1,087 50
39 St. Mary's	1	44 00	486 52	201 37	731 89	360 00
40 Sandwich	1	127 00	1,528 73	800 00	2,455 73	950 00
41 Sarnia	2	160 00	1,950 00	938 03	3,048 03	1,860 00
42 Sault Ste. Marie	1	147 00	3,324 79	1,032 74	4,504 53	1,430 00
43 Seaforth	1	52 00	650 18	180 11	882 29	540 00
44 Steelton	1	99 00	2,101 49	612 86	2,813 35	1,500 00
45 Sturgeon Falls	1	159 00	2,918 50	3,500 00	6,577 50	2,000 00
46 Sudbury	1	279 00	1,827 42	322 13	2,428 55	1,575 00
47 Thorold	1	68 00	885 00	12 64	965 64	650 00
48 Trenton	1	98 00	1,308 57	323 06	1,729 63	775 00
49 Vankleek Hill	1	95 00	969 00	416 54	1,480 54	1,000 00
50 Walkerton	1	116 00	859 24	6 95	982 19	600 00
51 Walkerville	1	66 00	565 00	926 54	1,557 54	400 00
52 Wallaceburg	1	64 00	2,700 00	1,936 22	4,700 22	815 00
53 Waterloo	1	93 00	1,495 37	1,775 72	3,364 09	500 00
54 Whitby	1	32 00	281 12	187 85	500 97	350 00
Totals	66	7,002 00	92,449 28	40,656 32	140,107 60	60,212 90
Totals						
1 Rural Schools	271	17,390 98	107,202 38	61,836 63	186,429 99	87,364 09
2 Cities	84	13,581 00	182,586 85	138,627 01	334,794 86	109,268 99
3 Towns	66	7,002 00	92,449 28	40,656 32	140,107 60	60,212 90
4 Villages	22	1,504 00	30,293 69	6,231 42	38,029 11	12,329 96
5 Grand Totals, 1906	443	39,477 98	412,532 20	247,351 38	699,361 56	269,175 94
6 Grand Totals, 1905	428	33,540 74	379,117 28	281,333 45	693,991 47	246,906 31
7 Increases	15	5,937 24	33,414 92	.....	5,370 09	22,269 63
8 Decreases	.....	.....	.....	33,982 07	.....	.....
9 Percentages	.....	5 64	58.99	35.37	.....	42.26

Cost per pupil, enrolled attendance: Rural Schools, $9.72;

SEPARATE SCHOOLS.

Statement, Teachers, etc.—*Concluded.*

ture.						Teachers.				
	Sites and building school houses.	Libraries, maps, apparatus, prizes and school books.	All other purposes.	Total amount expended.	Balances.	Number of Teachers.	Male.	Female.	Average salary, male.	Average salary, female (in addition members of Religious Orders received free residence).
	$ c.	$ c.	$ c.	$ c.	$ c.				$	$
1	445 70	.....	2,769 67	5,140 37	11 53	9	.....	9	.....	215
2	37 60	.....	296 28	1,303 88	.....	3	.....	3	.....	323
3	12 80	.....	3,421 95	5,434 75	123 16	7	.....	7	.....	228
4	434 00	.....	659 32	2,827 79	669 43	7	1	6	600	200
5	1,220 99	145 58	614 54	2,881 11	302 03	4	.....	4	.....	225
6	1,375 93	595 53	829 22	4,900 68	6 44	9	.....	9	.....	233
7	392 43	66 75	173 10	1,641 03	1,094 77	2	1	1	550	300
8	.....	32 56	1,431 17	3,350 73	207 44	8	.....	8	.....	244
9	.....	.....	310 95	1,210 95	59 39	4	.....	4	.....	225
10	50 00	.....	2,105 22	6,249 85	247 88	16	1	15	725	295
11	242 40	.....	172 98	1,015 38	92 81	3	.....	3	.....	200
12	200 00	65 80	42 85	728 65	81 86	1	.....	1	.....	500
13	1,859 20	70 16	608 05	3,737 41	.....	4	.....	4	.....	300
14	99 00	10 45	215 65	725 10	131 54	1	.....	1	.....	350
15	.....	.....	142 84	592 84	45 96	2	.....	2	.....	212
16	350 00	.....	1,378 70	4,548 70	520 65	15	.....	15	.....	200
17	.....	.....	172 88	747 88	221 81	2	.....	2	.....	287
18	232 00	.....	268 00	1,520 00	455 70	4	1	3	400	233
19	.....	.....	556 01	2,893 25	173 20	7	1	6	750	267
20	108 00	19 12	188 62	1,035 74	66 54	2	.....	2	.....	375
21	1,473 63	10 00	382 39	4,074 44	428 61	5	1	4	750	225
22	.....	212 74	369 38	1,307 12	516 43	2	.....	2	.....	362
23	.....	.....	140 05	448 39	119 00	1	.....	1	.....	325
24	1,181 55	.....	1,100 55	4,173 27	985 73	7	.....	7	.....	300
25	30 00	.....	34 25	364 25	5 71	1	.....	1	.....	300
26	.....	52 72	619 79	1,872 51	1,989 27	4	.....	4	.....	300
27	.....	.....	125 18	544 18	.....	2	.....	2	.....	200
28	228 80	115 30	968 28	1,880 38	1,166 10	3	.....	3	.....	200
29	23 38	11 63	59 60	494 61	555 61	2	.....	2	.....	200
30	.....	.....	88 83	388 83	70 13	1	.....	1	.....	300
31	549 73	.....	815 14	3,899 87	234 19	10	1	9	650	219
32	166 00	15 00	420 00	1,476 00	55 12	4	.....	4	.....	219
33	.....	.....	194 73	614 73	570 13	1	.....	1	.....	450
34	513 42	.....	2,703 75	4,417 17	237 31	4	.....	4	.....	300
35	.....	23 53	622 28	1,772 84	1,691 42	4	.....	4	.....	275
36	.....	.....	296 79	973 14	501 72	2	.....	2	.....	337
37	2,500 00	163 71	348 69	3,617 40	46 59	2	1	1	550	400
38	13 30	40 98	853 00	1,994 78	899 70	6	.....	6	.....	242
39	6 50	11 35	73 82	451 67	280 22	1	.....	1	.....	400
40	92 71	.....	1,361 79	2,404 50	51 23	4	.....	4	.....	237
41	500 00	5 00	310 00	2,675 00	373 03	6	.....	6	.....	300
42	37 50	.....	1,247 06	2,714 56	1,789 97	5	.....	5	.....	286
43	.....	.....	144 44	684 44	197 85	2	.....	2	.....	275
44	81 38	36 20	697 45	2,315 03	498 32	4	.....	4	.....	394
45	3,413 62	169 30	828 38	6,411 30	166 20	6	.....	6	.....	333
46	335 67	89 63	353 18	2,353 48	75 07	6	.....	6	.....	312
47	.....	120 00	190 20	960 20	5 44	3	.....	3	.....	217
48	175 00	.....	526 22	1,476 22	253 41	4	.....	4	.....	175
49	.....	64 36	.....	1,064 36	416 18	6	.....	6	.....	167
50	15 00	.....	294 49	909 49	72 70	4	.....	4	.....	150
51	.....	38 55	1,058 66	1,497 21	60 33	2	.....	2	.....	200
52	979 81	20 40	456 46	2,271 67	2,428 55	3	.....	3	.....	267
53	2,321 05	6 78	389 86	3,217 69	146 40	3	.....	3	.....	167
54	.....	22 29	47 12	419 41	81 56	1	.....	1	.....	350
	21,698 10	2,235 42	31,479 81	118,626 23	21,481 37	231	8	223	622	256
1	34,200 66	2,537 72	27,555 06	151,657 53	34,772 46	331	33	298	367	260
2	97,549 80	5,064 59	117,507 69	329,391 07	5,403 79	390	74	316	381	242
3	21,698 10	2,235 42	34,479 81	118,626 23	21,481 37	231	8	223	622	256
4	19,753 02	352 29	4,770 61	37,205 88	823 23	57	.....	57	.....	229
5	173,201 58	10,190 02	184,313 17	636,880 71	62,480 85	1,009	115	894	393	250
6	243,365 73	13,857 58	133,004 67	637,134 29	56,857 18	970	111	859	384	238
7	.....	.....	51,308 50	.....	5,623 67	39	4	35	9	12
8	70,164 15	3,667 56	.....	253 58	.....	.....	.....	.....	.....	.....
9	27.2	1.6	28 94	.....	.....	.....	11.4	88.6	.....	.....

Cities, $16.44; Towns, $9.77; Villages, $12.49; Province, $12.54.

ROMAN CATHOLIC

II. Table G.—Attendance, Pupils in the

Counties (including incorporated villages, but not cities or towns), etc.	Number of Pupils.	Boys.	Girls.	Average daily attendance.	Percentage of average to total attendance.	Reading.						Art.	Geography.	Music.	Literature.
						First Reader Part I.	First Reader Part II.	Second Reader.	Third Reader.	Fourth Reader.	Fifth Reader.				
1 Bruce	730	385	345	518	71	143	92	186	164	137	8	421	553	656	609
2 Carleton	1,756	817	939	1,084	62	639	299	289	306	210	13	1,096	945	392	662
3 Essex	2,165	1,155	1,010	1,195	56	715	371	393	388	290	8	1,372	1,334	1,170	1,320
4 Frontenac	372	188	184	219	59	67	44	62	81	110	8	331	270	138	309
5 Grey	265	121	144	140	53	46	33	44	73	59	10	116	168	56	184
6 Hastings	297	148	149	140	47	76	30	47	70	63	11	263	221	115	251
7 Huron	415	208	207	246	59	76	44	85	78	93	39	352	300	241	305
8 Kent	626	300	326	341	54	240	95	84	103	79	25	567	407	360	408
9 Lambton	68	35	33	36	53	15	4	11	13	20	5	68	54	68	46
10 Lanark	115	63	52	74	64	23	12	32	18	27	3	115	100	30	94
11 Leeds and Grenville	254	118	136	146	57	43	35	47	47	37	45	121	184	110	177
12 Lennox & Addington	69	33	36	46	66	13	7	15	20	10	4	64	45	.....	45
13 Lincoln	148	74	74	93	63	41	17	21	32	37	....	104	128	148	92
14 Middlesex	144	77	67	91	63	20	12	33	22	50	7	135	106	61	122
15 Norfolk	73	31	42	50	68	14	11	5	20	23	....	48	48	.....	48
16 Northumberland	250	121	129	158	63	61	30	40	46	65	8	250	155	97	188
17 Ontario	47	17	30	33	70	5	4	4	19	10	5	33	38	...	38
18 Peel	17	6	11	12	70	3	3	2	3	6	....	.....	10	.....	9
19 Perth	404	216	188	237	58	60	41	73	110	118	2	379	298	240	360
20 Peterborough	37	22	15	18	50	12	5	6	4	10	....	.....	25	.....	25
21 Prescott and Russell	5,881	2,899	2,982	3,468	59	2,514	1,212	1,140	633	374	8	2,210	2,802	1,393	1,584
22 Renfrew	777	398	379	420	54	231	133	140	126	101	46	353	389	343	505
23 Simcoe	175	85	90	104	59	56	34	22	33	25	5	175	175	134	175
24 Stormont, Dundas & Glengarry	977	479	498	520	53	388	187	150	126	112	14	417	410	232	337
25 Victoria	102	61	41	57	55	23	17	7	22	33	....	75	62	.....	65
26 Waterloo	541	281	260	364	67	128	78	147	116	72	....	527	393	342	436
27 Wellington	407	211	196	280	69	67	48	79	87	120	6	401	327	220	289
28 York	127	57	70	66	52	51	17	30	27	2	....	120	120	102	127
29 Districts	1,346	655	691	703	52	626	280	195	187	58	....	135	386	325	340
Totals	18,585	9,261	9,324	10,859	58	6,396	3,195	3,389	2,974	2,351	280	10,248	10,453	6,973	9,150
Totals, Incorporated Villages	2,979	1,401	1,578	1,913	65	946	503	514	540	370	106	2,526	2,037	1,717	1,865
Totals, Rural Schools	15,606	7,860	7,746	8,916	57	5,450	2,692	2,875	2,434	1,981	174	7,722	8,416	5,256	7,285
Cities.															
1 Belleville	361	178	183	204	56	84	71	56	53	94	....	361	277	361	277
2 Brantford	384	197	187	271	71	71	59	80	93	81	....	384	254	.....	254
3 Chatham	369	195	174	246	67	77	50	95	90	57	....	369	242	369	242
4 Guelph	153	224	229	356	78	116	94	78	76	89	....	153	277	453	277
5 Hamilton	1,688	841	847	1,228	73	556	248	240	320	231	93	1,688	1,594	1,688	1,060
6 Kingston	730	399	331	491	67	156	112	113	187	162	....	.....	730	730	730
7 London	775	393	382	643	83	160	111	193	150	161	....	775	504	504	504
8 Niagara Falls	117	81	66	111	75	43	14	25	37	28	....	147	90	147	147
9 Ottawa	6,791	3,709	3,082	4,476	66	2,113	1,380	1,346	1,058	767	127	5,370	4,368	5,296	240
10 Peterborough	856	462	394	626	73	162	129	140	232	193	....	199	607	856	712
11 St. Catharines	339	171	168	249	73	86	42	44	84	83	....	211	211	339	211
12 St. Thomas	218	118	100	184	84	31	42	46	48	51	....	218	218	218	218
13 Stratford	349	194	155	281	80	63	59	49	88	90	....	349	349	349	349
14 Toronto	5,534	2,819	2,715	3,812	69	1,361	706	1,223	1,201	771	272	3,260	3,371	5,534	3,554
15 Windsor	937	470	467	621	66	256	120	194	206	161	....	937	561	937	937
16 Woodstock	100	53	47	65	65	25	16	15	26	18	....	100	100	100	100
Totals	20,031	10,501	9,527	13,861	69	5,360	3,256	3,937	3,949	3,037	492	14,821	13,753	17,881	9,812

SEPARATE SCHOOLS.—*Continued.*

various branches of instruction, etc.

	Composition.	Grammar.	English History.	Canadian History.	Physiology and Hygiene.	Nature Study.	Physical Culture.	Bookkeeping.	Arithmetic and Mensuration.	Algebra.	Geometry.	Latin.	French.	German.	Elementary Science.	Commercial Subjects.	Agriculture.	Manual Training.	Household Science.	Maps and Prizes. Number of Maps.	Number of Schools giving prizes.	Number of trees planted on Arbor Day.
1	627	364	170	274	341	152	364	13	....	13	13	5	.....	415	....	....	202	.....	77	71	3	....
2	943	881	272	596	325	992	255	31	....	7	7	....	729	313	29	7	148	184	51	103	11	45
3	1,290	1,131	543	676	726	1,248	1,194	214	....	9	9	1	1,130	....	1	24	25	.....	....	201	11	72
4	302	236	151	206	173	296	165	8	....	8	8	4	4	....	1	4	....	.....	....	56	4	7
5	194	145	104	115	154	181	120	9	....	9	9	4	1	....	3	4	....	.....	....	67	4	8
6	223	172	107	151	188	156	151	11	....	9	9	....	.....	....	10	1	104	72	....	56	3	8
7	311	223	146	194	146	337	252	37	....	32	32	4	25	....	20	25	45	.....	....	72	5	....
8	453	255	163	207	342	412	306	32	130	28	27	....	250	....	13	14	56	84	....	64	2	9
9	53	44	44	44	30	68	68	5	5	5	5	....	.....	....	....	....	....	.....	....	17	1	....
10	85	94	45	59	45	98	26	3	....	3	3	3	.....	....	....	....	1	.....	....	23	2	....
11	186	165	111	120	121	140	196	45	....	45	44	36	35	....	15	17	10	.....	30	38	13	8
12	45	45	34	42	61	48	.....	2	....	2	2	....	.....	....	....	21	....	.....	....	12	....	....
13	148	123	51	69	148	148	148	....	....	....	....	....	.....	....	....	....	....	.....	....	12	....	20
14	127	80	58	72	91	93	110	7	108	7	6	....	.....	....	....	....	....	.....	....	43	4	1
15	59	43	23	43	23	23	.....	....	....	....	....	....	.....	....	....	....	....	.....	....	8	....	....
16	216	125	87	96	106	177	47	6	....	6	6	5	5	....	....	5	....	.....	....	42	3	25
17	38	34	15	29	15	47	47	15	....	5	5	....	.....	....	....	....	15	.....	....	8	....	....
18	11	9	4	5	4	14	.....	....	....	....	....	....	.....	....	....	....	....	.....	....	8	....	....
19	337	202	133	192	283	374	213	2	....	2	2	1	.....	....	....	1	64	.....	....	71	3	52
20	25	17	10	3	10	...	.....	....	....	....	....	....	.....	....	....	....	....	.....	....	8	....	....
21	2,585	2,244	566	1,231	1,139	969	763	63	....	7	6	....	5,256	....	....	21	141	66	120	323	31	125
22	552	331	179	253	329	457	357	38	....	43	45	14	73	....	30	27	...	73	....	87	8	34
23	115	154	57	58	58	84	.....	5	....	5	5	....	134	....	5	.. .	10	.....	....	14	2	....
24	480	418	201	272	119	243	239	18	235	17	16	11	472	....	11	7	29	37	58	81	4	14
25	62	61	33	36	21	.....	.....	....	....	....	....	....	.....	....	....	....	....	.....	....	13	....	13
26	468	287	99	204	181	413	468	21	....	....	....	....	.....	411	....	....	61	.....	42	56	3	30
27	330	262	159	214	176	262	178	6	35	6	6	....	.....	....	....	1	2	.....	....	70	2	....
28	123	29	.....	29	7	102	.....	....	....	....	....	....	.....	....	....	....	....	.....	....	8	....	....
29	559	332	97	173	41	285	146	....	227	....	....	....	1,072	25	...	....	90	4	....	81	12	8
	10,947	8,506	3,662	5,663	5,403	8,119	5,813	591	740	268	265	88	9,186	1164	138	179	1003	520	378	1713	131	479
	2,124	1,719	726	1,227	1,261	1,633	1,558	110	....	104	104	56	942	313	63	47	130	157	150	193	11	64
	8,823	6,787	2,936	4,436	4,142	6,486	4,255	481	740	164	161	32	8,244	851	75	132	873	363	228	1520	120	415
1	277	94	147	203	277	361	.....	....	....	....	....	....	.....	....	....	....	....	252	....	5	....	....
2	254	174	81	81	81	384	.....	....	....	....	....	....	.....	....	....	....	....	.....	....	12	....	....
3	242	147	104	147	242	369	369	....	....	....	....	....	.....	....	....	....	....	.....	....	6	1	...
4	277	181	89	277	277	277	453	....	....	....	....	....	.....	....	....	....	....	.....	....	32	3	....
5	1,060	1,060	452	691	1,159	1,688	1,688	93	93	....	....	22	.....	....	....	93	....	.....	....	72	7	18
6	730	730	162	349	349	.....	.....	....	....	....	....	....	.....	....	....	....	....	.....	....	30	....	....
7	775	504	161	311	775	775	775	....	....	....	....	....	.....	....	....	....	....	.....	....	47	7	10
8	104	90	43	43	43	90	147	....	63	....	....	....	.....	....	28	....	....	.....	....	12	....	....
9	4,287	4,071	1,561	3,368	3,363	3,931	3,647	283	....	130	125	43	3,501	....	125	169	112	3,569	1041	236	26	10
10	770	519	477	477	550	549	457	....	....	....	....	....	.....	....	....	....	....	.....	....	30	....	....
11	211	211	83	167	83	339	339	....	....	....	....	....	.....	....	....	....	....	.....	....	20	3	....
12	218	145	99	145	218	218	218	....	....	....	....	....	.....	....	....	....	....	23	12	10	1	....
13	349	178	90	227	349	349	349	....	....	....	....	....	.....	....	....	....	....	53	37	10	1	....
14	3,554	2,244	1,043	2,244	756	5,534	5,534	246	272	272	272	135	272	12	193	96	....	.....	....	312	....	....
15	937	367	161	367	937	937	500	....	....	....	....	....	152	....	....	....	....	.....	....	23	....	....
16	100	44	18	44	100	100	100	....	44	....	....	....	.....	....	....	....	....	.....	....	10	1	24
	14,145	10,759	4,771	9,144	9,559	15,901	14,576	622	472	402	397	200	3,925	12	346	358	112	3,897	1090	867	50	62

ROMAN CATHOLIC

II.—Table G.—Attendance, Pupils in the

Towns.	Number of Pupils.	Boys.	Girls.	Average daily attendance.	Percentage of average to total attendance.	Reading.						Art.	Geography.	Music.	Literature.	Composition.
						First Reader Part I.	First Reader Part II.	Second Reader.	Third Reader.	Fourth Reader.	Fifth Reader.					
1 Alexandria	491	249	242	294	60	168	54	109	95	65	....	491	491	.....	491	491
2 Almonte	139	76	63	95	68	29	33	29	15	33	....	.....	77	.....	77	77
3 Amherstburg	331	125	206	235	71	47	63	55	65	50	51	280	331	.....	273	331
4 Arnprior	376	200	176	260	69	107	62	58	107	42	....	376	269	376	376	269
5 Barrie	149	89	60	101	68	30	19	31	33	36	....	149	149	149	149	149
6 Berlin	509	277	232	368	72	110	52	116	126	105	....	509	436	509	436	509
7 Bonfield	116	57	59	66	57	47	27	21	9	12	....	.....	52	.....	42	60
8 Brockville	354	168	186	271	76	70	41	91	75	77	....	354	354	354	354	354
9 Cobourg	211	109	102	147	69	54	22	39	50	46	....	211	135	211	211	211
10 Cornwall	897	437	460	605	67	286	166	165	162	118	....	897	897	897	897	897
11 Dundas	128	74	54	87	68	27	31	21	18	31	....	128	49	128	70	70
12 Fort Frances	52	30	22	30	57	18	7	17	8	2	....	.....	34	.....	.....	34
13 Fort William	255	126	129	150	60	65	32	54	76	28	....	255	255	255	158	255
14 Galt	90	43	47	64	71	27	14	14	17	18	....	35	63	90	63	63
15 Goderich	64	34	30	57	89	14	8	10	16	16	....	64	32	.....	42	64
16 Hawkesbury	973	510	463	849	87	422	200	197	95	59	....	550	500	973	164	405
17 Ingersoll	74	42	32	63	86	18	14	6	19	17	....	74	42	74	42	56
18 Kenora	188	82	106	132	76	59	39	44	37	9	....	119	119	.....	62	97
19 Lindsay	387	159	228	271	70	52	70	54	85	86	40	305	285	387	285	295
20 Massey	133	61	72	80	60	75	18	18	9	13	....	133	133	133	40	58
21 Mattawa	294	139	155	209	71	70	51	49	60	46	18	294	173	246	224	224
22 Mount Forest	69	42	27	42	61	16	9	13	11	20	....	69	56	69	69	69
23 Newmarket	47	27	20	33	70	10	4	17	5	11	....	.....	33	47	37	37
24 North Bay	401	197	204	282	70	104	109	83	66	39	....	317	188	401	254	188
25 Oakville	44	19	25	27	61	18	2	8	5	11	....	44	26	44	26	24
26 Orillia	197	105	92	173	88	28	20	43	47	59	....	197	171	197	171	171
27 Oshawa	76	30	46	53	68	14	10	17	18	17	....	.....	76	76	76	76
28 Owen Sound	140	74	66	102	73	52	12	29	20	27	....	.....	76	140	76	76
29 Paris	63	29	34	45	71	15	9	8	14	17	....	63	31	63	63	48
30 Parkhill	51	26	25	28	55	18	4	8	12	9	....	34	22	.....	22	22
31 Pembroke	459	239	220	307	67	127	84	94	78	76	....	381	248	220	248	248
32 Perth	236	126	110	156	66	71	21	39	43	62	....	236	165	236	165	236
33 Picton	44	22	22	31	70	5	6	7	11	15	....	44	39	44	44	39
34 Port Arthur	288	151	137	175	61	56	45	66	69	52	....	288	182	288	232	282
35 Prescott	157	77	80	125	80	34	17	38	32	36	....	157	123	157	157	157
36 Preston	104	55	49	79	76	28	19	15	27	15	....	104	57	104	104	104
37 Rainy River	50	20	30	29	58	24	12	7	7	.....	....	50	7	50	.....	7
38 Renfrew	300	174	126	226	75	96	45	49	57	53	....	300	204	300	204	300
39 St. Marys	58	23	35	45	78	12	8	6	14	18	....	58	58	58	58	58
40 Sandwich	186	100	86	107	57	22	70	45	37	12	....	94	94	186	94	94
41 Sarnia	280	124	156	215	77	79	49	50	42	60	....	280	280	280	280	280
42 Sault Ste. Marie	259	123	136	158	61	89	32	35	47	56	....	259	259	259	259	259
43 Seaforth	87	46	41	53	61	19	9	16	16	27	....	87	60	87	59	68
44 Steelton	305	159	146	158	52	134	70	56	18	27	....	305	305	305	305	305
45 Sturgeon Falls	488	217	271	331	76	210	97	91	64	23	3	215	90	.....	26	90
46 Sudbury	357	181	176	218	61	129	75	52	46	44	11	357	228	357	357	357
47 Thorold	121	60	61	86	71	28	16	32	31	11	....	77	93	121	121	77
48 Trenton	145	72	73	95	65	21	19	28	35	42	....	145	124	145	124	124
49 Vankleek Hill	266	120	146	152	57	87	33	59	50	37	....	266	266	266	266	266
50 Walkerton	174	84	90	142	81	26	17	37	42	52	....	174	174	174	174	174
51 Walkerville	93	47	46	78	83	18	14	18	24	19	....	93	75	93	75	75
52 Wallaceburg	174	85	89	111	64	85	15	23	22	22	7	174	174	174	174	74
53 Waterloo	166	83	83	124	75	32	21	37	43	33	....	166	113	166	113	133
54 Whitby	48	31	17	33	69	7	13	4	9	15	....	28	24	.....	28	28
Totals	12,144	6,055	6,089	8,453	69	3,509	2,009	2,328	2,242	1,926	130	10,286	8,997	9,889	8,917	9,515
Totals.																
1 Rural Schools	15,606	7,860	7,746	8,916	57	5,450	2,692	2,875	2,434	1,981	174	7,722	8,416	5,256	7,285	8,823
2 Cities	20,031	10,504	9,527	13,864	69	5,360	3,256	3,937	3,949	3,037	492	14,821	13,753	17,881	9,812	14,145
3 Towns	12,144	6,055	6,089	8,453	69	3,509	2,009	2,328	2,242	1,926	130	10,286	8,997	9,889	8,917	9,515
4 Incorp'd Villages	2,979	1,401	1,578	1,943	65	946	503	514	540	370	106	2,526	2,037	1,717	1,865	2,124
5 Grand Totals 1906	50,760	25,820	24,940	33,176	65.35	15,265	8,460	9,654	9,165	7,314	902	35,355	33,203	34,743	27,879	34,607
6 Grand Totals 1905	49,324	24,772	24,552	32,030	64.94	14,731	7,899	9,753	8,710	7,156	1075	39,501	34,205	31,558	23,697	32,201
7 Increases	1,436	1,048	388	1,146	.41	534	561	.....	455	158	....	.....	.....	3,185	4,182	2,406
8 Decreases	.....	.....	.....	.....	.....	.....	.....	99	.....	.....	173	4,146	1,002	.....	.....	.....
9 Percentages	.....	50.86	49.13	65.35	.....	30.07	16.67	19.02	18.05	14.41	1.78	69.65	65.41	68.42	54.92	68.18

SEPARATE SCHOOLS.—*Concluded.*

various branches of instruction, etc.—*Concluded.*

	Grammar.	English History.	Canadian History.	Physiology and Hygiene.	Nature Study.	Physical Culture.	Bookkeeping.	Arithmetic and Mensuration.	Algebra.	Geometry.	Latin.	French.	German.	Elementary Science.	Commercial Subjects.	Agriculture.	Manual Training.	Household Science.	Maps and Prizes. Number of Maps.	Number of Schools giving prizes.	Number of Trees Planted on Arbor Day.
1	491	217	269	269	491	491	.....	....	....	....	...	.....	....	.....	.....	.....	.....	....	15	....	....
2	48	33	48	33	77	.....	.....	....	....	....	...	.....	....	.....	.....	.....	.....	....	12	1	....
3	221	101	166	170	307	331	25	....	36	36	...	13	.....	51	25	.....	.....	....	20	1	....
4	149	42	42	42	376	376	.....	....	....	....	...	.....	....	.....	.....	42	.....	....	15	....	....
5	100	36	67	149	149	149	.....	....	....	....	...	.....	....	.....	.....	.....	.....	....	16	....	....
6	221	109	221	436	509	509	.....	....	....	....	...	.....	509	.....	.....	.....	52	53	27	....	....
7	21	12	42	21	42	42	.....	....	....	....	...	116	.....	.....	.....	.....	.....	....	8	1	3
8	152	152	243	354	354	354	.....	....	....	....	...	.....	....	.....	.....	.....	354	....	12	....	....
9	96	96	96	96	211	211	.....	....	....	....	...	.....	....	.....	.....	.....	.....	....	6	1	....
10	198	118	280	897	897	897	.....	....	....	....	...	300	....	.....	.....	.....	.....	....	18	1	....
11	49	49	49	31	.....	.....	.....	....	....	....	...	.....	....	.....	.....	.....	.....	....	7	1	....
12	34	1	17	34	.....	52	.....	....	....	....	...	.....	....	.....	.....	.....	.....	....	6	1	....
13	104	104	104	255	255	255	.....	....	....	....	...	.....	....	.....	.....	.....	.....	....	5	1	....
14	35	18	35	18	63	.....	.....	....	....	....	...	.....	....	.....	.....	.....	.....	....	6	1	....
15	32	16	32	32	64	.....	.....	....	....	....	...	.....	....	.....	.....	.....	.....	....	11	1	....
16	550	550	550	59	164	973	59	....	....	....	...	916	....	.....	.....	.....	.....	....	26	1	2
17	36	36	36	36	36	74	.....	....	....	....	...	.....	....	.....	.....	.....	.....	....	7	....	....
18	97	32	97	32	76	90	.....	....	....	....	...	151	....	.....	.....	.....	.....	....	9	....	....
19	212	200	212	99	387	.....	40	....	40	40	...	.....	....	.....	.....	.....	.....	....	20	....	....
20	22	22	22	133	133	133	.....	....	....	....	...	115	....	.....	.....	9	.....	....	1	1	3
21	173	64	173	46	124	.....	18	....	8	8	2	211	.....	8	8	.....	.....	....	20	1	....
22	31	31	31	31	69	.....	.....	....	....	....	...	.....	....	.....	.....	.....	31	....	11	....	....
23	33	11	16	16	33	.....	.....	....	....	....	...	.....	....	.....	.....	.....	16	....	9	....	....
24	188	84	127	83	401	.....	.....	....	....	....	...	104	....	.....	.....	.....	.....	....	11	....	....
25	24	24	24	16	44	44	.....	....	....	....	...	.....	....	.....	.....	11	.....	....	5	1	....
26	151	59	106	106	106	.....	.....	....	....	....	...	.....	....	.....	.....	.....	.....	....	12	....	....
27	76	35	35	35	76	76	.....	....	....	....	...	.....	....	.....	.....	.....	.....	....	2	....	....
28	76	27	47	140	140	140	.....	....	....	....	...	.....	....	.....	.....	.....	.....	....	12	1	....
29	31	31	31	31	32	.....	.....	....	....	....	...	.....	....	.....	.....	.....	.....	....	3	1	....
30	16	7	16	16	22	.....	.....	....	....	....	...	.....	....	.....	.....	.....	.....	....	10	1	....
31	154	76	154	154	248	.....	.....	....	....	....	...	68	....	.....	.....	.....	.....	....	32	....	....
32	105	105	165	105	232	236	.....	....	....	....	...	.....	....	.....	.....	.....	170	....	5	1	....
33	33	15	15	33	44	44	.....	....	....	....	...	.....	....	.....	.....	44	44	....	7	....	....
34	182	121	182	121	232	288	.....	....	....	....	...	232	....	.....	.....	.....	.....	....	10	1	....
35	106	68	68	68	157	157	.....	....	....	....	...	.....	....	.....	.....	.....	.....	....	10	....	....
36	42	42	42	42	104	104	.....	....	....	....	...	.....	....	.....	.....	.....	.....	....	10	1	....
37	7	.....	7	.....	57	.....	.....	....	....	....	...	38	....	.....	.....	.....	.....	....	2	1	....
38	159	110	159	110	300	.....	.....	....	....	....	...	.....	....	.....	.....	.....	.....	....	10	....	....
39	38	32	32	38	58	58	.....	....	....	....	...	.....	....	.....	.....	.....	.....	....	6	....	....
40	91	49	94	94	186	186	.....	....	....	....	...	186	....	.....	.....	.....	.....	....	11	....	....
41	280	60	102	280	280	280	60	....	....	....	...	.....	....	.....	.....	.....	.....	....	20	2	....
42	138	138	138	138	259	82	.....	....	....	....	...	259	....	.....	.....	.....	.....	....	10	....	....
43	43	27	43	27	87	87	.....	....	....	....	...	.....	....	.....	.....	.....	.....	....	11	1	....
44	305	60	60	60	305	305	.....	....	....	....	...	305	....	.....	.....	.....	.....	....	6	1	100
45	90	51	90	33	33	.....	3	....	3	3	...	402	....	.....	.....	.....	.....	....	12	1	....
46	153	101	153	153	357	357	11	....	11	11	...	282	.....	11	11	55	.....	....	10	....	....
47	77	11	45	11	77	121	.....	....	....	....	...	.....	....	.....	.....	.....	.....	....	9	....	....
48	77	77	77	105	124	145	.....	77	....	....	...	.....	....	.....	.....	.....	.....	....	5	....	....
49	266	37	266	266	266	.....	.....	....	....	....	...	266	....	.....	.....	.....	.....	....	15	1	....
50	174	52	94	174	174	174	.....	....	....	....	...	.....	....	.....	.....	.....	.....	....	22	1	18
51	61	43	43	61	61	93	.....	....	....	....	...	46	.....	.....	.....	.....	.....	....	8	1	30
52	51	51	51	51	174	174	7	...	7	7	...	.....	.....	7	7	.....	.....	....	5	1	....
53	76	50	113	166	166	166	.....	...	....	....	...	.....	166	.....	.....	.....	.....	....	18	....	....
54	24	15	24	15	24	.....	.....	....	....	....	...	.....	....	.....	.....	.....	.....	....	6	....	....
	6,402	3,708	5,451	6,021	9,647	8,254	223	77	105	105	2	4,010	675	77	51	161	667	53	602	30	156
1	6,787	2,936	4,436	4,142	6,486	4,255	481	740	164	161	32	8,244	851	75	132	873	363	228	1,520	120	415
2	10,759	4,771	9,144	9,559	15,901	14,576	622	472	402	397	200	3,925	12	346	358	112	3,897	1090	867	50	62
3	6,402	3,708	5,451	6,021	9,647	8,254	223	77	105	105	2	4,010	675	77	51	161	667	53	602	30	156
4	1,719	726	1,227	1,261	1,633	1,558	110	....	104	104	56	942	313	63	47	130	157	150	193	11	64
5	25,667	12,141	20,258	20,983	33,667	28,643	1,436	1289	775	767	290	17,121	1,851	561	588	1,276	5,084	1521	3,182	211	697
6	25,526	10,732	18,593	23,909	24,944	29,858	1,865	....	1620	842	644	14,320	1,219	1,968	1,143	1,556	1,716	..	3,230	199	607
7	141	1,409	1,665	.....	8,723	.....	.....	....	....	....	..	2,801	632	.....	.....	.....	3,368	....	.....	12	90
8	.....	.....	.....	2,926	.....	1,215	429	....	845	75	354	.....	.....	1,407	555	280	.....	....	48	....	....
9	50.56	23.91	39.91	41.33	66.32	56.43	2.83	2.54	1.52	1.51	.57	33.73	3.64	1.10	1.16	2.51	10.91	2.99	.....	....	....

COLLEGIATE INSTITUTES

I.—Table H.—

Collegiate Institutes.	Receipts.						Teachers' salaries.
	Legislative grants.	Municipal grants (county).	Municipal grants (local)	School fees.	Balances and other sources.	Total receipts.	
	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
1 Aylmer	879 93	1,887 06	1,650 00	800 00	434 53	5,651 52	4,315 00
2 Barrie	*1,181 56	1,888 33	2,150 00	1,810 00	995 36	8,025 25	6,251 51
3 Berlin	†2,960 76	3,636 19	10,450 78	2,301 35	252 00	19,600 99	10,970 00
4 Brantford	*1,321 48	.....	7,900 00	2,527 00	1,331 61	13,080 09	9,200 00
5 Brockville	*1,282 34	1,450 00	8,843 41	975 50	.....	12,551 25	8,400 00
6 Chatham	1,222 06	3,300 00	9,000 00	1,076 90	1,075 68	15,674 64	11,000 00
7 Clinton	920 40	1,779 04	1,700 00	821 95	1,222 44	6,443 83	4,756 82
8 Cobourg	*†1,348 81	1,893 55	2,486 18	904 00	1,020 15	7,652 69	5,202 46
9 Collingwood	*985 62	985 62	3,600 00	1,544 39	873 90	7,989 53	5,580 85
10 Galt	*1,243 42	2,301 90	56,642 50	2,451 50	1,123 03	63,762 35	7,862 00
11 Goderich	1,116 08	1,307 84	3,000 00	1,688 65	1,998 22	9,110 79	5,675 00
12 Guelph	*1,372 84	799 79	7,520 70	453 50	12,284 39	22,431 22	7,773 00
13 Hamilton	*‡6,057 73	.....	26,670 00	5,992 50	318 00	39,038 23	20,289 25
14 Ingersoll	*†1,702 48	2,384 52	3,913 00	947 00	457 11	9,404 11	6,020 00
15 Kingston	†2,309 47	.....	8,558 00	5,128 00	730 86	16,726 33	13,847 52
16 Lindsay	*1,332 37	2,192 64	4,426 25	1,886 75	141 67	9,979 68	7,873 50
17 London	1,448 52	1,200 00	28,000 21	4,040 00	1,563 80	36,252 53	25,315 00
18 Morrisburg	*1,132 03	3,288 96	2,406 16	.....	2,910 85	9,738 00	5,799 24
19 Napanee	*1,141 81	2,700 00	2,900 00	91 00	1,693 82	8,529 66	5,602 20
20 Niagara Falls	1,207 88	329 05	7,000 00	.....	764 32	9,301 25	7,100 00
21 Orillia	1,192 83	2,744 14	2,700 00	1,482 65	824 24	8,943 86	6,147 01
22 Ottawa	*1,348 15	.....	18,106 00	14,144 25	384 35	33,983 05	24,742 50
23 Owen Sound	*1,289 14	3,212 74	6,250 00	2,379 00	1,790 80	14,921 68	10,230 00
24 Perth	961 56	1,609 20	3,140 16	387 00	1,814 05	7,911 97	4,890 00
25 Peterborough	*1,298 00	.....	9,000 00	2,449 50	625 97	13,373 47	9,007 00
26 Renfrew	†1,185 89	2,105 10	3,200 00	34 50	6,589 70	13,115 19	5,860 00
27 Ridgetown	*1,001 85	1,744 08	1,785 00	903 25	174 95	5,609 13	4,515 00
28 St. Catharines	1,248 27	2,229 51	6,960 00	95 00	114 00	10,646 78	8,548 40
29 St. Mary's	907 47	1,610 72	2,400 00	1,364 00	648 53	6,930 72	4,891 77
30 St. Thomas	*1,327 28	2,522 42	8,495 34	2,197 00	649 46	15,191 50	11,404 07
31 Sarnia	*1,350 58	2,005 89	6,738 22	.....	248 37	10,343 06	7,599 90
32 Seaforth	*1,028 21	1,658 62	1,900 00	1,378 40	1,952 73	7,917 99	5,023 63
33 Stratford	†2,286 57	1,300 00	7,000 00	3,851 64	638 83	15,077 04	9,130 39
34 Strathroy	*979 49	1,734 87	2,500 00	1,001 00	109 26	6,324 62	5,140 00
35 Toronto (Harbord)	*1,429 93	.....	27,405 70	7,512 00	1,022 96	37,370 59	27,376 50
36 Toronto (Jameson)	*1,380 80	.....	49,382 12	4,249 00	.....	55,011 92	19,693 13
37 Toronto (Jarvis)	*1,378 54	.....	20,869 18	5,322 25	.....	27,569 97	21,807 12
38 Toronto Junction	1,245 71	1,688 58	6,575 00	2,164 00	722 45	12,395 74	8,604 00
39 Vankleek Hill	*1,045 22	2,695 22	1,500 00	296 46	234 67	5,771 57	3,973 72
40 Whitby	830 23	1,295 94	2,000 00	487 10	307 33	4,920 60	3,945 58
41 Windsor	1,350 49	1,392 00	8,880 00	126 00	384 98	12,133 47	9,150 00
42 Woodstock	*†2,639 97	1,633 59	11,500 00	2,071 50	97 00	17,942 06	8,220 00
Totals	60,874 13	66,507 02	407,103 91	89,338 49	50,526 37	674,349 92	398,733 07

* Grant for Cadet Corps included. † Grant for Technical Education included.

AND HIGH SCHOOLS.

Financial Statement.

	Expenditure.						
	Buildings, sites, and all permanent improvements.	Repairs to school accommodations.	Library, scientific apparatus, maps, etc., typewriters drawing models and equipment for physical education.	School books, stationery, prizes, fuel, examinations and other expenses.	Total expenditure.	Balances.	Charges per year for tuition.
	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	
1	181 00	44 60	2 25	807 84	5,350 69	300 83	Res. F. I $5; others $10.
2	582 24	.....	62 31	1,121 36	8,017 42	7 83	$10.
3	370 00	153 49	278 35	7,585 91	19,357 75	243 24	$10
4	814 89	227 44	57 75	2,780 01	13,080 09	.....	City and Co. $10 ; others $16.
5	.....	189 52	304 08	2,682 15	11,575 75	975 50	$5.
6	330 84	.....	415 09	3,760 16	15,506 09	168 55	Res. 6 ; others $10.
7	.....	261 26	106 80	760 08	5,884 96	558 87	$6 ; $8 ; $10.
8	193 68	.....	24 00	706 70	6,126 84	1,525 85	$12.
9	407 52	254 50	86 69	1,210 17	7,539 73	449 80	F. I free ; others $10.
10	663 90	.....	.....	2,055 09	10,580 99	53,181 36	Co. $10 ; others $14.
11	.....	57 84	59 35	865 08	6,657 27	2,453 52	Lower Sch. $6, $8 ; Middle and Upper, $10.
12	11,115 78	33 43	.....	2,907 46	21,829 67	601 55	City free ; Co. and adj. Cos. $10 ; other Cos. $20.
13	478 87	.....	690 80	6,307 56	27,766 48	11,271 75	Res. Jr. Lower Sch. $2.50 ; other res. $10 ; non-res. $25.
14	.....	122 60	180 16	2,350 11	8,672 87	731 24	$7.50.
15	.....	480 61	294 15	2,104 05	16,726 33	.....	Res $5 to $25 ; non-res. $15 to $25 ; 5th class work of Public Sch. free.
16	436 98	.....	56 71	1,569 82	9,937 01	42 67	Res. Co. and adjacent Cos. $7.50 to $10 ; others $20.
17	.....	1,003 24	616 64	6,988 40	33,923 28	2,329 25	City and Co. $10 ; others $30.
18	356 58	438 84	.....	558 80	7,153 46	2,584 54	Free.
19	.....	161 55	22 05	1,058 32	6,844 12	1,685 54	Town and Co. free ; others $10.
20	353 45	96 69	192 19	1,558 92	9,301 25	.....	Free.
21	121 80	88 19	.....	1,036 91	7,393 91	1,549 95	Town $5 ; others $10.
22	1,184 61	.....	933 33	5,004 49	31,864 93	2,118 12	Res. $20 and $25 ; non res $45 and $50.
23	2,124 75	103 60	.....	1,597 79	14,056 14	865 54	Res. $8 to $12 ; Co. $10 ; others $10 to $15
24	1,129 56	49 73	.....	1,073 77	7,143 06	768 91	Co. $6 ; non-res. $16.
25	1,100 00	.....	175 00	2,591 47	12,873 47	500 00	Res. 1st year $5, other years $10 ; non-res. $25.
26	5,686 89	66 63	134 62	1,367 05	13,115 19	.....	Res. and Co. free ; others $15.
27	.....	198 29	38 00	857 84	5,609 13	.....	Town $6 ; others $10.
28	.....	1,097 13	.....	956 22	10,601 75	15 03	Res. and Co. free ; others $16.
29	17 93	86 47	47 01	889 24	5,932 36	998 36	Res. $5 ; all others $10.
30	178 03	208 61	227 70	2,300 14	14,318 55	872 95	City, 1st year free, other years $10 ; Co. $10 ; others $30.
31	.....	.....	321 47	2,166 04	10,087 41	255 65	Free.
32	.....	35 54	62 82	888 19	6,010 18	1,907 81	L. Sch. $6 and $8 ; M. and U. Sch. $10.
33	152 85	396 07	138 10	4,469 70	14,287 11	789 93	$10.
34	.....	114 10	.....	1,033 21	6,287 31	37 31	Town F. I free ; others $10.
35	488 80	1,442 87	730 00	5,059 54	35,097 71	9,476 88	F. I $6 ; F. II $15 ; F III $21 ; F. IV. $27 ; non-res. in F. I and II $6 extra.
36	23,709 83	309 79	707 92	3,387 25	47,807 92		
37	161 73	1,303 19	707 93	3,590 00	27,569 97		
38	719 42	313 83	221 12	1,953 16	11,811 53	584 21	$10 ; $15
39	500 00	140 14	181 78	757 13	5,552 77	218 80	Province free ; others $10.
40	.....	154 80	67 21	744 44	4,912 03	8 57	Town $6 ; Co. $6.75.
41	.....	158 43	159 00	2,019 80	11,487 23	646 24	City and Co. free ; others $30.
42	7,106 00	40 82	92 61	1,477 47	16,936 90	1,005 16	Res. and Co. $7.50 ; non-res. $10.
	60,667 93	9,833 78	8,394 99	94,958 84	572,588 61	101,761 31	9 free ; 33 not free.

‡ Grant ($4,500) for Normal College included.

COLLEGIATE INSTITUTES AND

I.—Table H.—Financial

High Schools.	Receipts.						Teachers' salaries.
	Legislative grants.	Municipal grants (county)	Municipal grants local)	School fees.	Balances and other sources.	Total receipts.	
	$ c.	$ c.	$ c.	$ c.	$ c	$ c.	$ c.
1 Alexandria	652 37	771 94	3,242 00	.....	1,385 78	6,052 09	2,920 00
2 Almonte	734 32	734 22	2,784 15	213 50	32 85	4,499 04	3,447 50
3 Arnprior	627 54	627 54	2,400 00	155 00	1,073 55	4,883 63	3,380 84
4 Arthur	*681 84	1,109 36	6,571 31	825 40	250 08	9,437 99	2,530 00
5 Athens	744 12	1,751 31	1,350 25	398 25	1,157 85	5,401 78	3,530 64
6 Aurora	605 71	700 00	950 00	631 50	525 31	3,412 52	2,320 80
7 Beamsville	482 66	500 00	966 98	.....	708 79	2,658 43	1,400 00
8 Belleville	†921 25	500 00	4,012 12	261 75	.....	5,695 12	4,850 04
9 Bowmanville	841 65	2,249 63	2,360 00	297 10	160 62	5,909 00	4,050 02
10 Bradford	611 87	611 84	600 00	811 00	441 87	3,076 58	2,210 00
11 Brampton	871 67	2,300 00	3,100 00	1,204 00	590 69	8,066 36	5,250 00
12 Brighton	476 31	952 05	950 00	.....	763 81	3,142 17	1,950 08
13 Caledonia	599 59	1,607 96	1,300 00	72 00	960 68	4,540 23	2,877 45
14 Campbellford	716 28	716 21	2,807 80	372 10	1,209 70	5,822 09	3,955 62
15 Carleton Place	723 43	723 43	3,000 00	340 68	95 38	4,882 92	3,965 00
16 Cayuga	589 13	1,542 55	1,250 00	.....	501 98	3,883 66	2,158 42
17 Chesley	585 25	917 42	1,700 00	850 00	104 67	4,157 34	3,000 28
18 Colborne	495 69	495 04	1,355 60	.....	1,867 44	4,213 77	1,696 08
19 Cornwall	922 66	2,545 22	8,568 28	.....	5,396 81	17,432 97	6,140 00
20 Deseronto	669 32	669 32	2,100 00	202 00	551 17	4,191 81	2,769 29
21 Dundas	*707 67	1,057 67	1,000 00	636 00	250 73	3,652 07	2,532 48
22 Dunnville	703 21	2,791 81	1,000 00	.....	213 03	4,708 05	3,741 80
23 Dutton	653 09	2,062 07	900 00	521 00	1,220 73	5,356 89	2,966 48
24 East Toronto	535 68	1,400 00	6,891 18	748 50	11,133 70	20,709 06	3,041 23
25 Elora	549 88	726 08	900 00	399 00	75 06	2,651 02	2,190 00
26 Essex	†882 45	2,098 50	2,000 00	19 75	926 72	5,927 42	3,579 34
27 Fergus	612 19	612 19	1,800 00	491 00	1,101 47	4,616 85	3,110 00
28 Forest	627 33	1,410 33	800 00	336 00	415 60	3,589 26	2,450 00
29 Fort William	1,171 18	.....	3,400 00	.....	139 15	4,710 33	3,336 66
30 Gananoque	811 09	1,061 09	2,760 96	111 50	40 00	4,784 64	3,684 34
31 Georgetown	701 83	1,108 51	730 83	1,050 00	296 22	3,887 39	3,143 50
32 Glencoe	625 21	866 18	650 00	708 00	66 15	2,915 54	2,378 70
33 Gravenhurst	996 38	.....	1,100 00	435 00	112 00	2,643 38	1,983 00
34 Grimsby	476 17	550 00	175 00	.....	1,208 72	2,409 89	1,500 00
35 Hagersville	618 57	800 00	650 00	.....	1,386 46	3,455 03	2,468 17
36 Harriston	639 22	639 20	1,818 55	654 00	105 55	3,856 52	3,175 75
37 Hawkesbury	572 84	1,582 84	711 17	.....	.....	2,866 85	2,236 00
38 Iroquois	774 50	1,887 06	1,311 65	.....	1,426 65	5,399 86	3,480 00
39 Kemptville	786 66	1,036 66	2,000 00	960 50	414 02	5,197 84	3,957 99
40 Kenora	1,244 90	.....	3,250 00	.....	.....	4,494 90	3,219 75
41 Kincardine	789 17	1,287 89	1,767 00	1,292 00	8,080 12	13,216 18	4,030 68
42 Leamington	705 67	1,605 67	1,500 00	108 75	558 73	4,478 82	3,470 00
43 Listowel	689 54	800 00	1,100 00	1,202 02	158 93	3,950 49	2,975 00
44 Lucan	664 13	752 35	1,000 00	1,170 25	321 38	3,908 11	2,680 00
45 Madoc	604 30	1,105 52	800 00	564 00	645 82	3,719 64	2,450 00
46 Markham	741 45	1,813 60	450 00	1,693 00	979 85	5,677 90	3,760 00
47 Meaford	869 78	1,748 05	2,500 00	884 00	402 43	6,404 26	4,520 00
48 Midland	569 63	468 40	3,350 00	434 95	141 47	4,964 45	3,000 00
49 Mitchell	624 31	800 00	1,600 00	491 10	259 11	3,777 52	2,585 00
50 Mount Forest	*772 81	1,399 31	1,400 00	644 75	161 52	4,378 42	3,008 21
51 Newburgh	584 87	1,855 00	650 00	.....	392 71	3,482 58	2,545 00
52 Newcastle	485 39	725 37	600 00	.....	581 02	2,391 78	1,350 00
53 Newmarket	718 69	700 00	1,100 00	813 50	309 90	3,642 09	2,607 50
54 Niagara	443 57	500 00	550 00	.....	470 30	1,963 87	1,368 75
55 Niagara Falls South	501 51	1,100 00	1,200 00	.....	2,148 84	4,950 35	2,491 63
56 North Bay	1,289 18	.....	2,870 00	540 00	.....	4,699 18	3,280 00
57 Norwood	*652 81	991 65	1,091 00	631 00	272 75	3,639 24	2,450 00
58 Oakville	655 26	509 46	1,100 00	480 00	518 94	3,563 56	2,745 00

* Grant ($50) for Cadet Corps included. † Grant for Technical Education included.

HIGH SCHOOLS.—*Continued.*

Statement.—*Continued.*

	Expenditure.					Balances.	Charges per year for tuition.
	Buildings, sites and all permanent improvements.	Repairs to school accommodations.	Library, scientific apparatus, maps, etc., typewriters, drawing models and equipment for physical education.	School books, stationery, prizes, fuel, examinations, and other expenses.	Total expenditure.		
	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	
1	111 10	.....	.....	1,168 55	4,199 65	1,852 44	Free.
2	300 00	.....	61 53	603 78	4,412 81	86 23	Res. $1 ; Co. and non-res. $6.
3	77 75	7 80	.....	544 47	4,010 86	872 77	Res. free ; non-res. $10.
4	5,670 23	320 89	124 03	578 82	9,223 97	214 02	$10.
5	372 07	.....	9 00	667 25	4,578 96	822 82	Res. free ; Co. $5 ; others $10.
6	354 80	.....	53 95	458 70	3,188 25	224 27	$10.
7	....	2 50	7 00	844 82	2,254 32	404 11	Free.
8	.....	.....	.....	845 08	5,695 12	.....	Res. free ; others $25.
9	262 45	286 32	14 02	763 10	5,375 91	533 09	Co. free ; others $4, $6, $7.50.
10	.....	.....	.....	763 62	2,473 62	602 96	Res. 1st year free ; others $10.
11	1,538 90	437 18	46 25	707 72	7,980 05	86 31	$10.
12	.....	113 23	87 83	358 14	2,509 28	632 89	Free.
13	2 00	320 88	42 36	747 49	3,990 18	550 05	Village and Co. free ; others $4.50.
14	477 32	.....	58 93	1,330 22	5,822 09	.....	H. S. D. $6 ; Co. and adjoining Cos. free.
15	.....	322 31	22 20	565 76	4,875 27	7 65	H. S. D. free ; Lanark and Carleton Cos. $5 ; others $10.
16	69 80	151 20	45 58	429 50	2,854 50	1,029 16	Free.
17	528 00	.....	314 03	61 67	3,903 98	253 36	$10.
18	246 10	31 24	85 55	374 90	2,433 87	1,779 90	Free.
19	5,728 78	379 21	963 25	1,069 62	14,280 86	3,152 11	Free.
20	.....	139 81	22 50	929 62	3,861 22	330 59	Res. free ; others $10.
21	.....	19 94	72 05	575 58	3,200 05	452 02	Res $9.50 ; non-res. $10.
22	7 00	99 50	.....	859 75	4,708 05	.....	Free.
23	129 49	94 66	9 66	643 54	3,843 83	1,513 06	$10.
24	13,069 10	.....	.....	402 87	16,513 20	4,195 86	Res. and Co. $10 ; others $20.
25	.....	39 80	49 14	321 12	2,600 06	50 96	Res. 5 ; Co. and non-res. $10.
26	.....	93 62	31 00	699 91	4,403 87	1,523 55	Res. and Co. free ; others $10.
27	....	47 42	105 05	538 81	3,801 28	815 57	H. S. D. free ; others $10.
28	.....	38 83	.....	688 02	3,176 85	412 41	Town $10 ; Co. free.
29	.....	50 25	295 96	314 57	3,997 44	712 89	Free.
30	.....	.....	31 50	1,068 80	4,784 64	.....	Res. free ; Co. and non-res $5.
31	.....	49 07	25 00	669 82	3,887 39	.....	F. I $7 ; others $10.
32	.....	39 85	.....	496 99	2,915 54	.....	$10.
33	3 00	5 60	8 98	628 15	2,628 73	14 65	F. 1 $5 ; other F's. $10.
34	.....	.....	25 00	386 53	1,905 53	504 36	Free.
35	.....	9 06	.....	779 48	3,256 71	198 32	Free.
36	90 15	23 10	37 83	529 69	3,856 52	.....	$10.
37	.....	.....	.....	630 85	2,866 85	.....	Free.
38	.....	.....	3 00	954 12	4,437 12	962 71	Free.
39	120 58	85 16	50 00	984 11	5,197 84	.....	H. S. D. free ; Co. $5 ; others $25.
40	745 72	.....	43 17	486 26	4,494 90	.....	Free ; non-res $10.
41	5,877 50	482 71	75 98	720 55	11,187 42	2,028 76	H. S. D. $8 ; Co. $10.
42	.....	66 98	52 08	362 75	3,951 81	527 01	Co. free ; outside Co. $10.
43	.....	25 00	.....	907 47	3,907 47	43 02	Town, 1st yr. $9 ; all others $10.
44	151 15	129 37	81 02	673 41	3,714 95	193 16	$10.
45	.....	141 98	156 25	311 61	3,059 84	659 80	Res. $7 ; Co. and others $10.
46	.....	83 00	131 71	729 16	4,703 87	974 03	$10.
47	765 22	779 74	.....	189 29	6,254 25	150 01	Town, 1st yr. $5; other yrs. $8; others $10.
48	934 81	17 67	137 85	832 80	4,923 13	41 32	Res. $5 ; non-res $10.
49	388 28	.....	116 35	659 82	3,749 45	28 07	Town $6 ; Co. $10.
50	131 60	175 10	.....	1,014 72	4,329 63	48 79	F. I free to res. ; others $10.
51	93 85	47 52	65 48	340 25	3,092 10	390 48	Free.
52	.....	17 23	57 49	330 83	1,755 55	636 23	Free ; outside Co. $7.50.
53	140 14	.....	74 36	820 09	3,642 09	.....	$10.
54	.....	13 40	50 00	523 60	1,955 75	8 12	Free.
55	.....	58 33	88 54	386 48	3,024 98	1,925 37	Free.
56	240 10	.....	108 86	715 89	4,344 85	354 33	Lower and Mid. Sehs, $10 ; Upper $35.
57	.....	22 76	1 87	598 23	3,072 86	566 38	$6
58	41 15	140 45	96 97	540 09	3,563 66	.....	$5 ; $8.

COLLEGIATE INSTITUTES AND

I.—Table H.—Financial

High Schools.	Receipts.						Teachers' salaries.
	Legislative grants.	Municipal grants (county).	Municipal grants (local).	School fees.	Balances and other sources.	Total receipts.	
	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
59 Omemee	428 19	428 19	916 17	168 00	11 19	1,951 74	1,550 00
60 Orangeville	841 25	1,200 00	1,600 00	1,367 50	846 02	5,854 77	4,560 00
61 Oshawa	830 53	1,714 45	2,500 00	418 50	5,729 20	11,192 68	4,797 12
62 Paris	718 11	718 11	3,100 00	329 01	.....	4,865 23	3,602 50
63 Parkhill	698 73	742 62	1,325 00	933 70	648 76	4,348 81	3,121 00
64 Pembroke	749 47	749 47	3,864 79	.....	7 67	5,371 40	4,345 00
65 Penetanguishene	.....	.....	2,000 00	.....	2,895 98	4,895 98	960 00
66 Petrolea	797 30	1,808 07	2,600 00	.....	4,006 13	9,211 50	4,137 30
67 Picton	867 13	2,503 01	2,000 00	44 00	2,788 32	8,202 46	4,908 34
68 Plantagenet	800 00	1,174 91	.....	.....	1,040 23	3,015 14	2,288 75
69 Port Arthur	1,363 22	.....	2,895 98	.....	521 91	4,781 11	2,990 00
70 Port Dover	467 48	467 48	673 91	.....	171 77	1,780 64	1,497 25
71 Port Elgin	567 70	850 00	1,200 00	491 50	502 20	3,611 40	2,405 00
72 Port Hope	920 57	2,446 95	1,809 36	687 00	97 43	5,961 31	4,916 66
73 Port Perry	*746 35	1,308 80	2,100 00	296 00	415 33	4,866 48	3,540 00
74 Port Rowan	427 99	700 00	484 72	.....	21 00	1,633 71	1,389 50
75 Prescott	644 77	406 73	2,250 00	105 50	76 02	3,483 02	2,410 70
76 Richmond Hill	568 44	880 16	300 00	970 44	206 50	2,925 54	2,039 50
77 Rockland	381 68	1,131 68	1,700 00	.....	.....	3,213 36	1,450 00
78 Sault Ste. Marie	1,221 34	.....	3,000 00	1,033 00	13,539 55	18,793 89	3,440 00
79 Simcoe	819 77	2,154 75	1,887 60	.....	49 81	4,911 93	4,147 50
80 Smith's Falls	744 01	.....	3,481 93	219 00	.....	4,444 94	3,840 00
81 Smithville	457 92	699 50	900 00	.....	877 03	2,934 45	1,490 00
82 Stirling	540 06	895 77	701 97	283 00	264 08	2,684 88	2,058 25
83 Streetsville	473 22	1,150 00	420 00	203 00	1,345 42	3,591 64	2,085 33
84 Sydenham	614 40	2,100 00	.....	389 90	228 17	3,332 47	2,529 00
85 Thorold	515 91	515 38	1,400 00	.....	653 20	3,084 49	1,800 00
86 Tillsonburg	626 75	626 75	1,300 00	616 50	845 82	4,015 82	2,703 98
87 Toronto Technical	.....	.....	33,310 00	5,625 78	746 80	39,682 58	30,458 99
88 Trenton	731 85	794 70	5,239 88	59 00	2,469 60	9,295 03	3,428 26
89 Uxbridge	*704 79	819 29	1,200 00	640 87	460 34	3,825 29	2,690 00
90 Vienna	447 73	597 73	550 00	.....	465 87	2,061 33	1,350 00
91 Walkerton	786 04	1,088 53	2,100 00	787 50	373 86	5,135 93	4,000 00
92 Wardsville	437 77	437 77	358 94	208 85	142 48	1,585 81	1,306 50
93 Waterdown	504 07	904 07	450 00	315 50	611 82	2,785 46	2,100 00
94 Waterford	638 49	1,542 40	800 00	.....	483 90	3,464 79	2,374 39
95 Watford	674 17	1,836 67	600 00	505 00	1,562 74	5,178 58	2,876 92
96 Welland	687 65	1,972 46	2,000 00	.....	1,711 59	6,371 70	3,272 74
97 Weston	614 51	700 00	700 00	648 00	482 53	3,145 04	2,274 25
98 Wiarton	630 49	630 49	1,400 00	358 50	1,340 23	4,359 71	2,569 49
99 Williamstown	674 24	789 55	2,596 74	.....	819 45	4,879 98	3,000 00
100 Wingham	.....	.....	1,029 00	367 60	11,302 85	12,699 45	1,140 00
1 Totals, High Schools	66,968 90	101,363 97	208,891 82	42,729 00	115,478 61	535,432 30	317,738 24
2 Totals, Collegiate Institutes	60,874 13	66,507 02	407,103 91	89,338 49	50,526 37	674,349 92	398,733 07
3 Grand totals, 1906	127,843 03	167,870 99	615,995 73	132,067 49	166,004 98	1,209,782 22	716,471 31
4 Grand totals, 1905	121,638 85	154,953 45	541,624 14	128,886 50	149,163 29	1,096,266 23	666,547 38
5 Increases	6,204 18	12,917 54	74,371 59	3,180 99	16,841 69	113,515 99	49,923 93
6 Decreases	.....	.....	.....	.....	.....	.....	.....
7 Percentages	10.57	13.88	50.92	10.91	13.72	.....	69.61

* Grant ($50) for Cadet Corps included.

HIGH SCHOOLS.—*Continued.*

Statement.—*Concluded.*

	Expenditure.						
	Buildings, sites, and all permanent improvements.	Repairs to school accommodation.	Library, scientific apparatus, maps, etc., typewriters, drawing models, and equipment for physical education.	School books, stationery, prizes, fuel, examinations, and other expenses.	Total expenditure.	Balances.	Charges per year for tuition.
	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	
59	.....	5 61	18 50	311 96	1,886 07	65 67	H. S. D. free ; others $10.
60	.....	176 54	130 93	755 03	5,622 50	232 27	Town $9 ; others $10.
61	4,772 55	31 71	108 82	863 58	10,573 78	618 90	F. I free ; others $7.50.
62	.....	31 72	120 26	773 47	4,527 95	337 28	Res. free ; non-res. $20.
63	.....	105 58	177 30	539 43	3,943 31	405 50	$6 ; $8 ; $10.
64	.....	64 30	161 87	800 23	5,371 40	.....	Free.
65	2,459 00	25 10	750 22	701 66	4,895 98	.....	Free.
66	68 16	70 38	122 05	650 33	5,048 22	4,163 28	Free.
67	1,163 65	.....	173 53	710 73	6,955 95	1,246 51	Free.
68	103 91	.....	18 01	556 02	2,966 69	48 45	Free.
69	594 32	.....	98 02	874 77	4,557 11	224 00	Free.
70	.....	.....	98 88	184 51	1,780 64	.....	Free.
71	.....	.....	.....	711 47	3,116 47	494 93	Res. $6.50 ; non-res, $10.
72	.....	.....	109 35	935 30	5,961 31	.....	Town $9 ; Co. free ; others $9.
73	486 96	.....	98 23	669 83	4,795 02	71 46	F. I free ; others $7.50.
74	10 00	40 00	25 71	168 50	1,633 71	.....	Free.
75	40 42	.....	20 75	907 23	3,379 10	103 92	Res. free ; non-res. $5.
76	.....	20 31	.....	406 81	2,466 62	458 92	$10.
77	.....	.....	50 00	213 36	1,713 36	1,500 00	Free.
78	597 00	.....	.....	486 46	4,523 46	14,270 43	$10.
79	83 77	.....	175 23	505 43	4,911 93	.....	H. S. D and Co. free ; others $10.
80	36 65	54 73	78 05	435 51	4,444 94	.....	Res. free ; Co. $5 ; others $10.
81	5 76	24 18	174 64	217 25	1,911 83	1,022 62	Free.
82	.....	16 00	12 25	290 10	2,376 60	308 28	$10.
83	.....	70 89	125 41	309 91	2,591 54	1,000 10	$5.
84	160 56	30 00	.....	397 77	3,117 33	215 14	Res. of Co. $5 ; non-res. $10.
85	74 41	3 95	46 25	508 59	2,433 20	651 29	Free.
86	13 20	26 44	9 89	731 77	3,485 28	530 54	Lower and Middle Schs. $7.50 ; Upper $10.
87	17 74	424 05	1,650 93	7,130 87	39,682 58	.....	1st yr. free ; 2nd $9 ; 3rd $15 ; specials $2 per term.
88	300 00	350 30	332 59	3,592 70	8,003 85	1,291 18	Free.
89	142 53	.....	11 78	980 98	3,825 29	.....	Res. $5 ; Co. and non-res. $7.50.
90	25 00	.....	29 63	127 06	1,531 69	529 64	Free.
91	.....	77 87	34 25	556 15	4,668 27	467 66	$10.
92	5 10	26 65	.....	247 56	1,585 81	.....	Res. $7.50 ; Co. and non-res. $10.
93	265 50	25 00	2 00	392 96	2,785 46	.....	$5.
94	.....	3 85	54 40	514 27	2,946 91	517 88	Free.
95	.....	75	.....	671 28	3,548 95	1,629 63	Res. $10 ; Co. free ; others $10.
96	187 37	21 20	.....	661 64	4,082 95	2,288 75	Free.
97	450 13	43 48	142 40	234 78	3,145 04	.....	$10.
98	4 46	17 98	.....	1,691 37	4,283 30	76 41	$5.
99	29 29	.....	96 11	973 55	4,098 95	781 03	Free.
100	1,032 00	.....	14 75	703 91	2,890 66	9,808 79	$6 ; $8 ; $10.
1	51,797 58	7,198 24	9,313 15	70,658 63	456,705 84	78,726 46	50 free ; 50 not free.
2	60,667 93	9,833 78	8,394 99	94,958 84	572,588 61	101,761 31	9 free ; 33 not free.
3	112,465 51	17,032 02	17,708 14	165,617 47	1,029,294 45	180,487 77	59 free ; 83 not free.
4	103,515 08	19,548 71	23,010 99	191,876 08	1,004,498 24	91,767 99	57 free ; 83 not free.
5	8,950 43	.....	.....	.....	24,796 21	88,719 78	2 free.
6	.....	2,516 69	5,302 85	26,258 61	.....	.....	
7	10.93	1.65	1.72	16.09	.....	.....	41.55 free : 58.45 not free.

Cost per pupil, enrolled attendance, $35.02 ; average attendance, $56.93.

COLLEGIATE INSTITUTES

Table I.—Attendance, Pupils in the schools

Collegiate Institutes.	Pupils.				Number of pupils in—			Number of pupils from—		
	Boys.	Girls	Totals.	Average attendance.	Lower School.	Middle School.	Upper School.	Municipalities composing the High School District.	Municipalities within the County.	Other Counties.
1 Aylmer	63	82	145	87	79	44	22	60	84	1
2 Barrie	126	140	266	163	132	105	29	165	91	10
3 Berlin	182	135	317	191	208	92	17	170	141	6
4 Brantford	209	235	444	270	289	105	50	313	113	18
5 Brockville	166	187	353	228	226	95	32	268	80	5
6 Chatham	222	243	465	301	289	152	24	341	116	8
7 Clinton	70	78	148	90	100	36	12	86	60	2
8 Cobourg	74	110	184	105	73	103	8	124	60	.....
9 Collingwood	104	136	240	149	128	95	17	162	48	30
10 Galt	136	164	300	185	191	93	16	184	96	20
11 Goderich	99	159	258	155	133	89	36	148	108	1
12 Guelph	154	175	329	216	208	88	33	261	60	8
13 Hamilton	432	426	858	538	417	299	142	709	96	53
14 Ingersoll	116	115	231	132	174	35	22	108	76	47
15 Kingston	259	321	580	356	311	241	28	491	80	9
16 Lindsay	146	171	317	199	165	125	27	196	98	23
17 London	540	520	1,060	617	691	264	105	844	191	25
18 Morrisburg	81	105	186	120	63	98	25	73	112	1
19 Napanee	106	157	263	172	154	77	32	123	133	7
20 Niagara Falls	120	192	312	192	225	62	25	236	57	19
21 Orillia	144	156	300	190	211	63	26	164	90	46
22 Ottawa	463	386	849	568	669	137	43	742	70	37
23 Owen Sound	209	263	472	289	234	178	60	275	154	43
24 Perth	89	109	198	133	150	29	19	120	72	6
25 Peterborough	170	182	352	270	278	52	22	301	48	3
26 Renfrew	124	174	298	168	194	88	16	144	142	12
27 Ridgetown	103	102	205	113	133	56	16	85	120	.....
28 St. Catharines	134	188	322	197	226	66	30	211	101	10
29 St. Mary's	113	165	278	189	130	111	37	135	70	73
30 St Thomas	218	261	479	290	368	80	31	363	116	.....
31 Sarnia	130	202	332	221	222	92	18	253	75	4
32 Seaforth	112	121	233	154	119	85	29	95	126	12
33 Stratford	176	182	358	227	217	105	36	278	68	12
34 Strathroy	96	101	197	112	112	75	10	110	85	2
35 Toronto (Harbord)	375	464	839	546	507	250	82	830	9	.....
36 " (Jameson)	246	267	513	330	333	132	48	496	14	3
37 " (Jarvis)	317	325	642	388	425	157	60	622	15	5
38 Toronto Junction	169	157	326	191	221	82	23	200	44	82
39 Vankleek Hill	79	118	197	118	156	32	9	63	100	34
40 Whitby	82	105	187	123	107	67	13	102	83	2
41 Windsor	123	229	352	219	270	63	19	281	69	2
42 Woodstock	161	207	368	227	258	73	37	222	138	8
Totals	7,238	8,315	15,553	9,729	9,796	4,371	1,386	11,155	3,709	689

AND HIGH SCHOOLS.—*Continued.*

and in the various subjects, etc.

	Occupation of Parents.						Number of pupils in the various subjects.									
	Commerce.	Agriculture.	Professions.	Mechanical occupations.	Laboring.	Other callings.	English Grammar.	English Composition and Rhetoric.	English Literature.	Canadian History.	British History.	Ancient History.	Medieval History	Modern History.	Geography.	Reading.
1	16	85	10	19	15	.....	130	145	143	123	140	62	39	39	123	114
2	72	87	23	60	16	8	261	262	264	253	259	129	29	29	238	144
3	85	35	51	73	37	36	308	317	317	301	306	47	2	2	182	230
4	156	101	43	103	24	17	411	424	424	277	277	124	17	17	325	320
5	87	74	33	100	41	18	323	350	350	323	350	67	3	12	303	226
6	126	120	51	88	80	.....	441	465	465	344	344	126	6	6	357	465
7	27	55	16	25	14	11	136	147	147	136	140	35	3	3	101	100
8	54	72	9	30	12	7	170	178	178	178	178	54	8	8	176	73
9	70	71	19	27	42	11	227	240	240	196	240	107	7	7	233	169
10	55	60	12	140	13	20	284	292	292	84	209	83	5	....	232	191
11	32	102	22	70	26	6	221	250	250	245	245	231	10	10	207	132
12	122	54	30	92	10	21	296	329	329	131	106	88	33	33	208	208
13	264	104	89	305	12	84	716	822	822	716	745	307	70	....	417	461
14	57	106	18	41	2	7	215	229	229	210	225	54	11	6	173	152
15	196	79	103	131	36	35	525	567	568	275	243	119	5	5	409	400
16	122	76	23	38	24	34	308	317	317	241	195	121	3	7	288	241
17	311	191	124	329	62	43	955	1,015	1,010	955	983	264	16	21	811	691
18	20	100	13	24	17	12	164	186	186	85	61	120	7	7	161	93
19	45	125	29	32	12	20	231	259	259	139	149	93	19	8	174	197
20	64	51	22	81	92	2	287	309	309	287	309	84	16	16	243	225
21	87	76	36	69	.....	32	223	285	277	253	267	71	12	11	252	252
22	450	35	124	92	61	87	780	841	829	595	543	83	11	11	594	654
23	126	127	51	81	46	38	400	461	461	350	392	180	29	33	355	340
24	25	72	13	36	38	14	186	196	196	185	194	44	3	2	185	136
25	99	44	40	130	6	33	330	352	352	274	293	74	14	9	352	278
26	88	101	8	58	26	17	285	298	298	282	298	104	10	10	282	194
27	26	80	9	24	28	38	195	205	205	195	205	72	10	10	197	159
28	102	50	25	47	39	59	292	322	322	322	256	72	6	6	292	226
29	37	126	25	31	45	14	259	270	270	101	112	121	21	21	186	168
30	148	116	17	123	47	28	448	479	479	448	479	111	16	16	448	368
31	105	64	31	105	24	3	324	330	330	217	202	98	9	4	197	222
32	29	128	21	33	15	7	202	202	200	149	190	85	10	10	115	119
33	121	76	33	95	4	29	322	348	348	322	358	121	16	5	73	217
34	40	89	24	35	9	.....	193	197	197	193	196	84	6	6	117	143
35	280	.....	168	182	.....	209	822	839	839	766	540	323	7	7	766	666
36	298	12	54	119	14	16	411	513	513	360	340	100	10	....	333	465
37	290	20	110	125	85	12	582	636	636	298	623	152	7	5	286	410
38	102	44	31	105	14	30	312	323	323	312	323	314	6	3	211	251
39	42	117	13	3	13	9	188	197	194	160	190	36	6	5	188	120
40	36	38	29	28	32	24	181	183	183	100	137	80	3	1	150	107
41	131	33	32	112	22	22	298	334	336	168	168	58	5	5	145	227
42	100	95	29	60	50	34	331	346	346	258	346	128	15	15	207	258
	4,743	3,291	1,663	3,504	1,205	1,147	14,173	15,260	15,233	11,807	12,356	4,826	541	431	11,292	10,812

COLLEGIATE INSTITUTES

Table I.—Attendance, Pupils in the schools

Collegiate Institutes.	Number of pupils in the various subjects.—*Continued.*									
	Arithmetic and Mensuration.	Algebra.	Geometry.	Trigonometry.	French.	German.	Latin.	Greek.	Zoology.	Botany.
1 Aylmer	129	139	137	17	114	11	127	.....	65	65
2 Barrie	243	258	189	26	114	19	179	3	176	176
3 Berlin	309	214	213	9	71	190	167	1	184	184
4 Brantford	386	374	238	39	335	81	329	12	233	233
5 Brockville	296	291	190	21	212	44	269	10	154	154
6 Chatham	441	344	229	24	197	34	277	40	179	179
7 Clinton	136	145	110	10	40	12	90	8	78	78
8 Cobourg	176	141	124	8	66	6	112	6	6	6
9 Collingwood	227	204	169	15	103	19	174	.....	101	101
10 Galt	284	234	156	10	187	78	161	5	128	128
11 Goderich	222	191	157	27	115	56	120	8	132	132
12 Guelph	296	285	183	33	235	86	244	4	156	156
13 Hamilton	715	817	815	106	544	191	673	23	75	465
14 Ingersoll	217	191	141	19	152	5	127	.....	83	83
15 Kingston	511	483	158	14	142	23	180	9	84	84
16 Lindsay	305	282	237	23	162	26	184	11	4	131
17 London	955	988	614	65	844	151	839	15	762	762
18 Morrisburg	165	180	157	25	129	24	151	8	74	74
19 Napanee	231	226	154	27	169	38	201	3	152	152
20 Niagara Falls	287	309	243	22	160	21	189	3	247	247
21 Orillia	269	242	119	18	181	36	208	5	199	199
22 Ottawa	792	774	492	54	758	110	651	21	441	461
23 Owen Sound	400	412	412	48	295	32	305	81	179	179
24 Perth	186	194	112	15	124	20	153	8	136	136
25 Peterborough	330	274	274	20	186	26	314	1	179	179
26 Renfrew	282	298	298	16	133	32	122	4	11	67
27 Ridgetown	197	166	166	16	62	15	145	5	120	120
28 St. Catharines	292	300	218	27	151	52	142	20	66	66
29 St. Mary's	257	262	262	28	187	18	258	9	217	177
30 St. Thomas	148	350	262	31	127	42	212	3	175	175
31 Sarnia	314	267	158	14	142	23	180	9	84	84
32 Seaforth	202	182	147	28	99	62	198	13	112	112
33 Stratford	322	318	318	36	141	97	257	6	48	48
34 Strathroy	191	193	138	9	129	18	156	5	107	107
35 Toronto (Harbord)	820	818	813	81	756	365	674	70	270	270
36 " (Jameson)	411	494	496	32	466	181	428	32	317	317
37 " (Jarvis)	570	637	637	70	587	188	546	40	238	268
38 Toronto Junction	311	321	156	19	147	33	213	9	131	131
39 Vankleek Hill	188	188	120	8	100	20	150	10	140	140
40 Whitby	177	181	118	8	66	8	114	5	109	109
41 Windsor	315	229	155	16	175	32	163	.....	6	6
42 Woodstock	331	323	318	31	231	40	220	6	144	143
Totals	14,136	13,732	10,803	1,168	9,331	2,565	10,602	531	6,502	7,084

AND HIGH SCHOOLS.—*Continued.*

and in the various subjects, etc.—*Continued.*

	Number of pupils in the various subjects.—*Concluded.*									Special Courses.					
	Chemistry.	Physics.	Mineralogy.	Writing.	Bookkeeping.	Stenography.	Typewriting.	Art.	Physical Education.	Commercial.	Agriculture.	Manual Training.	Household Science.	Arithmetic and English Grammar.	Art.
1	64	100	8	79	79	.....	.....	.....	79	.....	.....	.....	.....	30	.....
2	238	255	4	120	155	46	27	158	262	.....	.....	.....	.....	.....	.....
3	96	200	4	152	165	95	51	231	245	95	.....	148	99	46	224
4	187	336	2	229	139	65	68	242	326	65	.....	115	112	55	6
5	110	260	2	160	184	42	32	147	.....	40	.....	.....	.....	50	.....
6	227	342	3	236	236	121	121	168	441	121	.....	.....	.....	152	.....
7	75	145	.....	55	77	39	48	77	148	15	.....	.....	.....	38	.....
8	5	58	6	73	35	40	40	43	163	.....	.....	40	.....	.....	.....
9	113	198	2	106	106	51	29	172	234	51	.....	.....	.....	55	.....
10	95	216	1	136	117	55	62	91	280	60	.....	.....	.....	55	.....
11	141	199	6	91	99	76	60	69	242	65	.....	.....	.....	89	.....
12	153	258	5	146	146	59	59	149	320	59	.....	.....	44	88	.....
13	304	243	35	417	231	40	15	231	701	.....	.....	242	212	120	.....
14	81	177	7	105	81	33	13	83	227	6	.....	70	79	37	.....
15	87	187	3	170	170	118	61	81	302	61	.....	.....	.....	36	.....
16	172	212	.....	152	158	48	48	152	305	48	.....	.....	.....	72	.....
17	685	727	15	652	457	224	65	592	791	224	.....	209	279	119	592
18	96	157	.....	56	56	23	25	63	90	21	.....	.....	.....	101	.....
19	124	249	5	52	164	58	35	179	222	40	.....	.....	.....	48	.....
20	87	276	2	193	221	131	76	155	225	.....	.....	.....	.....	32	.....
21	110	237	9	175	175	53	64	164	252	.....	.....	.....	.....	67	.....
22	146	570	4	478	145	70	88	445	818	.....	.....	.....	.....	42	.....
23	185	398	18	221	221	35	35	201	248	.....	.....	.....	.....	170	.....
24	54	193	.....	86	136	.....	.....	135	198	.....	.....	.....	.....	.....	.....
25	60	200	.....	228	.....	95	50	.....	352	74	.....	.....	.....	36	.....
26	81	171	2	114	114	39	4	.....	298	47	.....	74	72	91	.....
27	69	166	6	88	88	38	34	109	197	54	.....	.....	.....	54	.....
28	92	93	.....	162	98	98	59	32	292	98	.....	.....	.....	35	32
29	185	275	130	96	125	45	9	145	165	21	.....	.....	.....	102	.....
30	165	249	.....	217	217	129	72	193	479	72	.....	40	.....	80	.....
31	87	187	3	170	170	118	61	81	302	61	.....	.....	.....	36	.....
32	162	222	9	119	85	25	32	109	225	16	.....	.....	.....	85	.....
33	67	83	1	196	127	84	75	60	.....	35	.....	115	102	35	33
34	157	190	3	84	100	19	40	116	193	.....	.....	.....	.....	54	.....
35	222	642	7	507	52	.....	.....	.....	507	.....	.....	.....	.....	32	.....
36	119	442	2	247	247	.....	.....	240	473	.....	.....	.....	.....	54	38
37	167	450	6	253	213	.....	.....	248	572	.....	.....	.....	.....	35	.....
38	62	194	5	104	88	53	53	71	.....	53	.....	.....	.....	28	.....
39	36	180	.....	80	100	16	40	130	188	16	.....	.....	.....	.....	30
40	177	177	1	100	100	43	.....	107	107	.....	.....	.....	.....	50	.....
41	68	222	.....	189	256	108	63	227	332	112	.....	.....	.....	41	45
42	78	231	10	128	146	54	51	102	345	51	.....	80	88	20	.....
	5,689	10,567	326	7,422	6,079	2,486	1,806	6,505	12,448	1,681	.....	1,133	1,087	2,365	1,000

COLLEGIATE INSTITUTES

11. Table I.—Attendance, Pupils in the schools

High Schools.	Pupils.				Number of pupils in—			Number of pupils from—		
	Boys.	Girls.	Total.	Average attendance.	Lower School.	Middle School.	Upper School.	Municipalities composing the High School Dis.	Municipalities within the County.	Other Counties.
1 Alexandria	71	85	156	90	118	38	.....	133	14	9
2 Almonte	51	61	112	73	58	48	6	70	30	12
3 Arnprior	63	87	150	88	106	40	4	115	15	20
4 Arthur	67	75	142	86	81	50	11	77	64	1
5 Athens	79	111	190	125	101	80	9	69	114	7
6 Aurora	47	57	104	61	64	34	6	47	50	7
7 Beamsville	19	36	55	30	26	29	.....	55	.....	.....
8 Belleville	110	113	223	132	159	48	16	178	41	4
9 Bowmanville	48	87	135	83	71	50	14	76	57	2
10 Bradford	65	68	133	84	76	57	.....	48	82	3
11 Brampton	102	88	190	115	114	52	24	78	105	7
12 Brighton	29	46	75	46	52	18	5	29	46	.....
13 Caledonia	47	73	120	84	70	39	11	39	61	20
14 Campbellford	95	89	184	98	125	51	8	121	54	9
15 Carleton Place	68	77	145	95	75	56	14	111	23	11
16 Cayuga	41	50	91	57	57	26	8	32	59	.....
17 Chesley	65	70	135	85	75	48	12	80	34	21
18 Colborne	39	34	73	45	38	35	.....	32	39	2
19 Cornwall	158	155	313	199	208	77	28	153	132	28
20 Deseronto	35	64	99	58	61	30	8	70	17	12
21 Dundas	72	67	139	84	96	43	.....	88	51	.....
22 Dunnville	52	76	128	80	84	35	9	77	42	9
23 Dutton	74	127	201	127	54	107	40	65	122	14
24 East Toronto	73	55	128	76	93	24	11	82	43	3
25 Elora	32	51	83	48	41	32	10	40	42	1
26 Essex	50	67	117	73	57	36	24	49	68	.....
27 Fergus	58	74	132	85	74	45	13	66	63	3
28 Forest	62	69	131	81	76	44	11	56	75	.....
29 Fort William	39	50	89	40	66	19	4	88	1	.....
30 Gananoque	58	89	147	95	93	41	13	108	29	10
31 Georgetown	70	91	161	105	109	41	11	53	65	43
32 Glencoe	56	53	109	69	56	41	12	31	73	5
33 Gravenhurst	40	53	93	52	62	27	4	92	1	.....
34 Grimsby	46	54	100	52	79	21	.....	35	27	38
35 Hagersville	55	63	118	80	73	40	5	54	64	.....
36 Harriston	51	50	101	61	54	33	14	52	21	28
37 Hawkesbury	36	36	72	37	47	18	7	37	32	3
38 Iroquois	75	87	162	106	111	43	8	55	91	16
39 Kemptville	90	136	226	143	121	75	30	80	71	75
40 Kenora	36	42	78	45	59	18	1	75	3	.....
41 Kincardine	91	107	198	127	108	72	18	104	93	1
42 Leamington	60	93	153	92	89	56	8	77	57	19
43 Listowel	95	94	189	119	101	60	28	169	1	19
44 Lucan	85	75	160	108	84	41	35	51	105	4
45 Madoc	42	51	93	50	46	39	8	46	47	.....
46 Markham	115	130	245	145	120	94	31	20	199	26
47 Meaford	69	108	177	108	97	65	15	81	80	16
48 Midland	47	71	118	54	73	35	10	92	24	2
49 Mitchell	65	40	105	68	63	42	.....	59	46	.....
50 Mount Forest	57	68	125	83	73	48	4	74	16	35
51 Newburgh	72	79	151	101	72	79	.....	34	111	6
52 Newcastle	28	38	66	36	42	24	.....	35	31	.....
53 Newmarket	66	58	124	76	80	44	.....	70	47	7
54 Niagara	23	26	49	25	34	15	.....	36	13	.....
55 Niagara Falls South	35	49	84	40	68	16	.....	36	48	.....
56 North Bay	42	58	100	62	75	19	6	93	2	5
57 Norwood	83	85	168	97	113	55	.....	50	96	22

AND HIGH SCHOOLS.—*Continued.*

and in the various subjects, etc.—*Continued.*

	Occupations of Parents.						Number of Pupils in the various subjects.									
	Commerce.	Agriculture.	Professions.	Mechanical Occupations.	Laboring Occupations.	Other Callings.	English Grammar.	English Composition and Rhetoric.	English Literature.	Canadian History.	British History.	Ancient History.	Mediæval History.	Modern History.	Geography.	Reading.
1	13	102	1	16	24	.....	156	156	156	156	156	38	.....	....	156	118
2	16	45	11	31	7	2	108	112	112	108	112	39	3	3	108	78
3	55	32	9	27	26	1	117	150	150	145	149	44	.....	2	142	111
4	33	68	4	21	10	6	131	142	142	53	78	50	4	....	142	81
5	31	124	10	15	10	.....	184	190	190	125	90	120	4	....	175	133
6	15	34	14	26	6	9	98	104	104	98	98	40	.....	6	98	104
7	5	21	7	16	4	2	55	55	55	33	22	20	.....	....	55	33
8	81	32	26	69	9	6	213	223	213	126	131	22	8	....	101	223
9	16	59	7	34	4	15	121	132	132	125	130	59	6	....	117	71
10	12	86	7	8	15	5	133	133	133	133	133	57	.....	....	110	76
11	25	90	22	20	15	18	166	182	182	166	182	52	15	15	166	114
12	13	29	13	3	20	7	70	75	75	52	67	18	5	....	67	52
13	12	75	6	10	12	5	70	110	110	107	112	39	11	8	107	70
14	24	79	15	25	29	12	172	184	183	135	184	59	4	4	176	125
15	31	37	17	47	12	1	138	145	145	92	66	38	1	...	136	75
16	16	44	14	11	4	2	57	89	89	88	88	31	5	5	88	64
17	24	44	16	25	24	2	75	132	132	75	75	55	6	2	123	75
18	11	27	7	4	12	12	73	73	73	73	73	35	.....	....	68	38
19	84	98	22	43	29	37	285	305	305	285	305	206	10	10	285	305
20	20	28	2	28	18	3	94	98	98	96	99	49	2	2	85	73
21	13	39	7	51	19	10	139	139	139	135	135	135	.....	....	117	96
22	33	37	14	32	10	2	120	125	125	77	123	34	2	2	109	97
23	22	99	16	39	13	12	161	201	201	161	201	147	40	40	161	54
24	37	29	14	39	5	4	127	128	128	127	128	28	7	7	127	117
25	14	31	7	8	17	6	56	82	82	64	82	39	.....	....	70	51
26	37	57	12	8	2	1	93	109	109	93	102	37	12	8	93	57
27	32	60	9	10	8	13	74	131	131	117	117	45	6	5	71	74
28	15	56	5	13	23	19	120	130	131	123	129	55	.....	....	123	72
29	25	1	14	35	10	4	85	89	89	85	85	19	3	....	81	66
30	34	38	13	62	.....	.....	131	147	147	134	147	54	4	4	108	112
31	46	67	20	18	4	6	154	158	158	154	154	45	5	1	154	106
32	13	63	11	8	8	6	81	108	108	76	108	41	7	9	81	78
33	12	16	3	27	18	17	87	87	87	70	92	27	.....	....	80	70
34	10	55	5	16	12	2	100	100	100	100	100	21	.....	....	100	77
35	27	45	13	7	19	7	115	118	118	73	116	42	3	....	105	105
36	22	33	16	18	.....	12	84	92	92	84	92	38	3	4	82	61
37	31	21	6	8	6	.....	64	71	72	53	51	23	3	3	59	56
38	29	96	9	19	9	.....	125	162	162	150	160	49	3	3	150	125
39	30	135	31	7	18	5	196	226	226	196	226	105	29	29	196	86
40	19	.....	17	16	23	3	78	78	78	77	78	19	.....	....	59	59
41	42	100	16	28	11	1	189	198	192	79	141	78	6	9	141	133
42	23	68	20	13	14	15	145	153	153	153	153	75	4	....	129	89
43	53	82	16	22	7	9	161	186	186	161	186	77	9	9	158	101
44	21	86	17	21	10	5	81	152	152	137	152	68	23	11	137	102
45	18	30	10	11	10	14	85	85	93	85	85	56	1	3	85	46
46	32	147	22	20	10	14	214	245	245	214	245	125	12	5	184	214
47	27	82	21	18	8	21	162	176	176	162	162	80	8	4	162	97
48	77	12	5	12	11	1	115	116	117	110	116	45	7	....	108	108
49	32	44	7	18	2	2	105	105	105	105	105	42	.....	...	99	72
50	27	51	10	18	14	5	121	125	125	73	125	52	.....	....	121	23
51	15	100	8	6	20	2	151	151	151	151	151	79	.....	....	151	151
52	7	32	6	2	7	12	66	66	66	66	66	24	.....	....	66	35
53	24	42	9	21	28	.....	80	124	124	124	124	44	.....	....	104	80
54	5	17	7	6	10	4	49	49	49	37	49	15	.....	....	49	34
55	26	22	3	30	3	.....	84	84	84	68	84	16	.....	....	68	68
56	20	.....	12	48	9	11	94	100	100	88	94	25	.....	....	69	75
57	18	107	4	22	10	7	168	168	168	168	168	55	.....	....	168	135

COLLEGIATE INSTITUTES

II. Table I.—Attendance, Pupils in the schools,

High Schools.	Number of Pupils in the various subjects—*Continued*.									
	Arithmetic and Mensuration.	Algebra.	Geometry.	Trigonometry.	French.	German.	Latin.	Greek.	Zoology.	Botany.
1 Alexandria	155	155	74	.....	155	.....	155	.....	118	118
2 Almonte	108	112	94	6	46	9	88	2	95	95
3 Arnprior	120	149	76	4	56	21	122	15	116	116
4 Arthur	131	142	142	4	33	.....	90	.....	81	81
5 Athens	184	189	189	9	82	3	178	2	98	83
6 Aurora	98	104	104	6	56	8	91	.....	.....	64
7 Beamsville	55	55	55	.....	10	.....	14	.....	26	26
8 Belleville	131	223	101	6	66	11	78	.....	148	148
9 Bowmanville	121	130	100	9	68	8	72	2	72	72
10 Bradford	133	130	133	.....	68	.....	75	.....	.....	76
11 Brampton	166	180	132	15	120	5	148	6	12	162
12 Brighton	68	75	42	5	28	5	51	.....	52	52
13 Caledonia	70	112	112	6	72	7	105	.....	81	81
14 Campbellford	176	180	180	7	124	7	173	2	128	128
15 Carleton Place	82	141	141	8	84	7	88	2	90	90
16 Cayuga	88	91	91	6	32	.....	67	.....	64	64
17 Chesley	75	130	130	9	128	11	128	2	2	77
18 Colborne	73	73	73	.....	32	.....	53	.....	.....	18
19 Cornwall	285	271	195	12	180	15	119	5	185	185
20 Deseronto	94	98	98	.....	57	11	62	.....	73	73
21 Dundas	138	130	98	.....	79	5	82	.....	.....	95
22 Dunnville	121	119	76	5	52	14	95	.....	77	80
23 Dutton	161	201	201	40	57	.....	170	.....	64	64
24 East Toronto	127	128	128	10	106	18	110	4	113	113
25 Elora	55	82	53	10	46	6	79	.....	54	54
26 Essex	93	108	85	9	46	10	72	5	65	65
27 Fergus	119	131	131	5	82	44	106	1	77	77
28 Forest	76	131	88	8	81	24	108	2	2	72
29 Fort William	85	88	88	4	79	2	76	1	74	74
30 Gananoque	141	120	120	13	94	20	74	2	50	50
31 Georgetown	154	158	158	5	27	6	113	2	132	132
32 Glencoe	81	108	108	10	31	.....	56	.....	7	67
33 Gravenhurst	88	88	88	.....	67	.....	62	.....	66	66
34 Grimsby	100	100	58	.....	38	.....	31	.....	18	18
35 Hagersville	115	118	102	3	58	8	77	.....	.....	115
36 Harriston	92	97	97	13	52	21	73	.....	61	61
37 Hawkesbury	64	71	43	5	64	.....	45	.....	56	56
38 Iroquois	125	162	103	8	80	4	120	2	131	131
39 Kemptville	196	220	220	32	128	9	193	8	92	92
40 Kenora	77	78	78	1	39	.....	44	.....	.....	56
41 Kincardine	117	151	151	9	97	13	136	2	8	8
42 Leamington	144	152	114	8	65	6	75	2	83	83
43 Listowel	160	185	185	25	149	63	184	9	109	109
44 Lucan	84	152	152	28	99	17	139	.....	116	116
45 Madoc	85	85	56	8	30	5	83	.....	.....	29
46 Markham	214	245	245	31	215	35	237	4	12	132
47 Meaford	162	157	157	15	69	17	137	.....	6	6
48 Midland	108	110	110	9	67	.....	66	.....	68	68
49 Mitchell	105	105	80	.....	45	16	65	.....	75	75
50 Mount Forest	121	124	124	3	39	2	117	.....	1	74
51 Newburgh	151	150	150	.....	50	.....	84	.....	.....	70
52 Newcastle	66	66	66	.....	11	.....	24	.....	.....	30
53 Newmarket	80	108	109	.....	92	.....	72	.....	78	78
54 Niagara	49	49	34	.....	17	.....	32	1	34	34
55 Niagara Falls, South	84	84	45	.....	54	22	58	5	47	47
56 North Bay	94	94	91	6	78	4	73	.....	69	69
57 Norwood	168	166	124	.....	42	5	115	.....	.....	125

AND HIGH SCHOOLS.—*Continued.*

and in the various subjects, etc.—*Continued.*

	Number of Pupils in the various subjects—*Continued.*									Special Courses.					
	Chemistry.	Physics.	Mineralogy.	Writing.	Bookkeeping.	Stenography.	Typewriting.	Art.	Physical Education.	Commercial.	Agriculture.	Manual Training.	Household Science.	Arithmetic and English Grammar.	Art.
1	74	74	.....	103	103	.....	.....	118	.....	.....	.....	.....	.....	36	.....
2	109	110	.....	59	59	39	19	54	.....	17	.....	.....	.....	20	.....
3	141	144	.....	73	73	.....	.....	117	.....	.....	.....	.....	.....	26	.....
4	65	142	.....	81	81	.....	.....	81	112	.....	.....	.....	.....	50	.....
5	146	151	.....	77	77	.....	.....	80	.....	.....	.....	.....	.....	84	.....
6	76	104	.....	51	51	.....	.....	51	.....	.....	.....	.....	.....	18	.....
7	35	55	.....	26	26	10	.....	32	.....	.....	.....	.....	.....	16	.....
8	86	218	4	49	80	.....	.....	76	.....	.....	.....	.....	.....	15	.....
9	53	90	.....	41	41	.....	.....	71	.....	.....	.....	.....	.....	40	.....
10	133	133	.....	55	70	42	25	.....	.....	22	.....	.....	.....	55	.....
11	60	164	12	114	116	28	28	114	.....	.....	.....	.....	.....	28	.....
12	18	63	.....	37	37	.....	.....	.....	.....	.....	.....	.....	.....	17	.....
13	73	115	.....	70	70	20	20	70	.....	.....	.....	.....	.....	39	.....
14	177	174	2	125	125	.....	.....	125	.....	.....	.....	.....	.....	48	.....
15	125	94	.....	31	68	.....	.....	75	.....	.....	.....	.....	.....	56	.....
16	39	91	.....	47	47	.....	.....	64	.....	.....	.....	.....	.....	17	.....
17	102	134	2	72	72	.....	.....	80	75	.....	.....	.....	.....	48	.....
18	35	45	.....	38	38	.....	.....	.....	.....	.....	.....	.....	.....	16	.....
19	158	265	3	218	68	42	42	75	78	42	.....	.....	.....	77	.....
20	93	93	.....	73	73	.....	.....	73	.....	.....	.....	.....	.....	7	.....
21	57	132	.....	94	97	34	47	95	139	7	.....	.....	.....	23	.....
22	45	115	.....	79	71	36	.....	63	120	.....	.....	.....	.....	21	.....
23	171	201	10	54	20	.....	.....	54	.....	.....	.....	.....	.....	107	.....
24	121	125	7	117	112	.....	.....	115	.....	.....	.....	.....	.....	16	.....
25	39	81	3	.....	41	.....	.....	41	.....	.....	.....	.....	.....	19	.....
26	76	98	3	24	24	.....	.....	56	57	.....	.....	36	.....	36	.....
27	115	126	.....	43	43	.....	.....	43	.....	.....	.....	.....	.....	45	.....
28	52	129	.....	76	76	.....	.....	76	.....	.....	.....	.....	.....	44	.....
29	46	86	.....	60	72	47	19	66	88	.....	.....	.....	.....	4	.....
30	98	109	.....	71	71	41	41	43	147	41	.....	.....	.....	25	.....
31	83	139	.....	71	71	9	32	106	132	.....	.....	.....	.....	45	.....
32	53	108	7	37	37	.....	.....	61	.....	.....	.....	.....	.....	28	.....
33	31	93	.....	62	62	6	12	62	93	12	.....	.....	.....	15	.....
34	21	96	.....	78	78	.....	.....	75	.....	.....	.....	.....	.....	7	.....
35	41	116	.....	73	73	.....	.....	73	.....	.....	.....	.....	.....	26	.....
36	88	98	.....	34	34	7	26	54	33	4	.....	.....	.....	23	.....
37	65	67	3	34	35	.....	.....	53	.....	.....	.....	.....	.....	7	.....
38	102	161	6	87	87	17	.....	125	.....	.....	.....	.....	.....	44	.....
39	220	220	11	83	83	48	48	112	.....	5	.....	.....	.....	71	.....
40	18	77	.....	59	41	.....	.....	47	.....	.....	.....	.....	.....	.....	.....
41	144	144	8	149	149	45	43	142	.....	45	.....	.....	.....	72	.....
42	81	150	.....	43	43	5	.....	88	.....	.....	.....	.....	.....	56	.....
43	118	187	.....	52	52	.....	.....	101	161	.....	.....	.....	.....	60	.....
44	111	157	6	60	60	15	20	102	.....	.....	.....	.....	.....	53	.....
45	30	30	.....	29	29	.....	.....	29	.....	.....	.....	.....	.....	39	.....
46	115	170	130	120	120	.....	.....	120	.....	.....	.....	.....	.....	51	.....
47	152	152	4	92	89	25	25	77	162	.....	.....	.....	.....	65	.....
48	45	110	.....	110	65	9	12	65	50	.....	.....	.....	.....	33	.....
49	56	104	.....	49	49	.....	.....	72	105	.....	.....	.....	.....	42	.....
50	49	123	.....	73	73	.....	.....	73	37	.....	.....	.....	.....	48	.....
51	79	119	.....	31	31	60	.....	70	.....	.....	.....	.....	.....	75	.....
52	30	30	.....	16	19	.....	.....	30	.....	.....	.....	.....	.....	24	.....
53	91	121	.....	80	80	38	36	80	124	10	.....	.....	.....	44	.....
54	15	29	.....	34	34	25	25	34	34	.....	.....	.....	.....	15	2
55	31	54	.....	39	52	17	38	68	68	.....	.....	.....	.....	16	.....
56	89	93	2	60	60	6	6	60	.....	.....	.....	.....	.....	.....	.....
57	125	125	.....	117	100	.....	.....	.....	60	.....	.....	.....	.....	33	.....

COLLEGIATE INSTITUTES

II. Table I.—Attendance, Pupils in the schools

	High Schools.	Pupils.			Average attendance.	Number of pupils in			Number of pupils from—		
		Boys.	Girls.	Totals.		Lower School.	Middle School.	Upper School.	Municipalities composing the High School District.	Municipalities within the County.	Other Counties.
58	Oakville	60	56	116	72	80	36	.....	58	51	7
59	Omemee	28	29	57	24	26	31	.....	33	19	5
60	Orangeville	84	127	211	133	99	93	19	99	57	55
61	Oshawa	69	109	178	99	131	29	18	118	56	4
62	Paris	63	71	134	86	100	22	12	87	38	9
63	Parkhill	69	110	179	112	96	57	26	61	104	14
64	Pembroke	76	76	152	90	108	40	4	129	21	2
65	Penetanguishene	24	36	60	55	48	12	.....	60	.....	.....
66	Petrolea	55	125	180	99	113	52	15	94	86	.....
67	Picton	81	126	207	123	118	70	19	113	90	4
68	Plantagenet	16	49	65	34	65	.....	.....	33	29	3
69	Port Arthur	35	68	103	55	80	22	1	103	.....	.....
70	Port Dover	33	36	69	42	37	32	.....	40	18	11
71	Port Elgin	40	49	89	55	40	44	5	43	46	.....
72	Port Hope	97	136	233	156	99	101	33	108	124	1
73	Port Perry	58	59	117	66	79	27	11	49	46	22
74	Port Rowan	40	34	74	45	51	23	.....	34	40	.....
75	Prescott	51	68	119	81	81	32	6	85	32	2
76	Richmond Hill	71	73	144	87	141	1	2	141	1	2
77	Rockland	24	43	67	32	66	1	.....	41	24	2
78	Sault Ste. Marie	70	104	174	90	135	35	4	121	53	.....
79	Simcoe	83	104	187	111	93	78	16	78	106	3
80	Smith's Falls	64	107	171	115	112	46	13	133	12	26
81	Smithville	40	39	79	44	50	29	.....	41	36	2
82	Stirling	30	41	71	47	29	35	7	31	40	.....
83	Streetsville	29	34	63	37	30	26	7	19	31	13
84	Sydenham	58	63	121	77	80	41	.....	121	.....	.....
85	Thorold	26	64	90	60	62	28	.....	64	17	9
86	Tillsonburg	67	88	155	89	82	57	16	70	38	47
87	Toronto Technical	337	609	946	443	662	188	96	926	15	5
88	Trenton	77	93	170	106	115	38	17	111	16	43
89	Uxbridge	78	74	152	105	93	45	14	72	78	2
90	Vienna	13	22	35	18	20	15	.....	30	3	2
91	Walkerton	64	76	140	100	80	42	18	81	59	.....
92	Wardsville	21	22	43	21	33	10	.....	23	15	5
93	Waterdown	48	59	107	64	50	45	12	71	4	32
94	Waterford	53	50	103	65	59	33	11	38	61	4
95	Watford	75	89	164	105	94	46	24	61	97	6
96	Welland	84	136	220	126	132	71	17	81	136	3
97	Weston	55	47	102	61	65	33	4	90	7	5
98	Wiarton	50	62	112	68	72	36	4	66	33	13
99	Williamstown	44	54	98	68	80	18	.....	95	.....	3
100	Wingham	59	78	137	119	79	49	9	73	48	16
1	Totals, High Schools	6,098	7,741	13,839	8,349	8,543	4,262	1,034	8,048	4,824	967
2	Totals, Collegiate Institutes	7,238	8,315	15,553	9,729	9,796	4,371	1,386	11,155	3,709	689
3	Grand totals, 1906	13,336	16,056	29,392	18,078	18,339	8,633	2,420	19,203	8,533	1,656
4	Grand totals, 1905	13,035	15,626	28,661	17,567	18,192	8,251	2,218	18,572	8,470	1,619
5	Increases	301	430	731	511	147	382	202	631	63	37
6	Decreases	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
7	Percentages	45.37	54.63	.....	61.5	62.39	29.37	8.23	65.33	29.03	5.63

AND HIGH SCHOOLS.—*Continued.*

and in the various subjects, etc.—*Continued.*

	Occupation of Parents.						Number of Pupils in the various subjects.									
	Commerce.	Agriculture.	Professions.	Mechanical Occupations.	Laboring Occupations.	Other Callings.	English Grammar	English Composition and Rhetoric.	English Literature.	Canadian History.	British History.	Ancient History.	Mediæval History.	Modern History.	Geography.	Reading.
58	20	55	10	9	19	3	116	116	116	114	114	36	.....	....	106	80
59	3	32	8	5	6	3	57	57	57	31	57	31	.....	....	57	26
60	45	100	25	34	1	6	188	205	207	191	207	111	6	6	116	116
61	40	51	13	52	18	4	171	174	178	160	171	40	7	7	167	131
62	23	45	12	44	7	3	122	134	134	100	60	34	5	5	100	100
63	35	117	13	8	6	.....	153	179	179	106	104	57	14	10	153	96
64	63	14	18	38	15	4	146	152	152	140	142	44	2	....	128	108
65	19	1	8	14	10	8	60	60	60	60	60	12	.....	....	60	48
66	39	51	12	42	31	5	165	180	180	113	87	64	15	4	113	113
67	47	102	16	20	22	.....	194	205	205	95	142	83	6	7	154	138
68	8	35	1	8	4	9	65	65	65	65	65	7	.....	65	65	65
69	36	4	29	28	5	1	102	102	102	100	100	20	.....	....	96	90
70	12	26	3	5	17	6	69	69	69	37	69	32	32	32	69	37
71	15	31	7	9	14	13	84	89	89	81	89	29	.....	....	84	60
72	60	104	12	16	24	17	200	200	233	200	230	134	10	10	149	99
73	32	44	12	14	12	3	106	117	112	106	110	38	11	11	106	112
74	21	33	3	5	8	4	51	74	74	74	74	46	.....	....	70	51
75	28	29	4	19	29	10	113	119	119	81	81	32	5	2	75	81
76	23	88	8	15	1	9	94	103	103	94	103	54	6		86	70
77	11	26	3	11	16	.....	67	67	67	67	67	.....	.....	....	66	66
78	56	12	12	44	41	9	168	173	173	137	72	173	2	1	163	152
79	30	78	14	52	11	2	171	184	184	184	184	80	6	6	171	105
80	34	39	13	54	23	8	158	171	171	158	171	59	6	6	158	112
81	10	61	.....	3	3	2	79	79	79	60	79	29	.....	....	79	50
82	10	44	6	2	8	1	66	71	71	66	71	35	2	....	66	52
83	9	38	3	6	7	.....	56	56	56	56	56	26	.....	....	56	30
84	11	90	6	5	5	4	121	121	121	80	121	41	.....	....	121	80
85	20	30	5	6	20	9	90	90	90	90	90	28	.....	....	85	75
86	22	74	7	29	11	12	132	153	153	131	112	47	9	9	132	109
87	520	20	85	237	65	19	62	679	679	376	433	26	57	57	232	679
88	44	57	9	24	35	1	153	167	167	153	170	43	12	5	61	115
89	28	71	17	19	7	10	138	148	148	138	143	46	8	4	136	93
90	4	22	2	4	3	.....	35	35	35	35	35	15	.....	....	35	25
91	28	45	18	19	8	22	125	140	140	90	125	44	9	1	67	80
92	7	26	7	2	.....	1	43	43	43	43	43	16	.....	....	43	33
93	10	43	6	8	34	6	91	107	107	91	107	57	7	7	91	50
94	16	60	13	6	4	4	92	97	97	92	94	33	5	2	92	59
95	44	81	8	24	3	4	156	164	164	162	164	70	16	16	103	94
96	73	66	26	50	3	2	203	213	213	202	205	46	9	2	152	150
97	18	23	12	23	11	15	98	102	102	77	97	36	.....	....	90	65
98	20	50	5	25	12	.....	112	112	112	108	108	40	.....	....	80	72
99	4	65	10	13	.....	6	98	98	98	98	34	18	.....	....	96	80
100	7	74	12	22	10	12	128	137	129	128	137	98	2	9	128	79
1	3,110	5,311	1,168	2,309	1,287	654	11,677	13,361	13,381	11,174	11,965	5,040	550	497	11,087	9,377
2	4,743	3,291	1,663	3,504	1,205	1,147	14,173	15,260	15,233	11,807	12,356	4,826	541	431	11,292	10,812
3	7,853	8,602	2,831	5,813	2,492	1,801	25,850	28,621	28,614	22,981	24,321	9,866	1,091	928	22,379	20,189
4	7,491	8,386	2,680	6,303	2,151	1,650	25,399	27,667	27,775	22,566	23,975	9,535	66	880	22,003	19,924
5	362	216	151	.....	341	151	451	954	839	415	346	331	1,025	48	376	265
6	....	.....	.....	490	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	.....	.....
7	26.72	29.26	9.63	19.78	8.48	6.13	87.95	97.37	97.35	78.19	82.75	33.57	3.71	3.15	76.14	68.69

COLLEGIATE INSTITUTES

II. Table I.—Attendance, Pupils in the schools

High Schools.	Number of Pupils in the various subjects.—*Continued.*									
	Arithmetic and Mensuration.	Algebra.	Geometry.	Trigonometry.	French.	German.	Latin.	Greek.	Zoology.	Botany.
58 Oakville	116	84	84	.....	26	4	82	.....	62	62
59 Omemee	57	57	57	.....	15	.....	38	.....	.....	26
60 Orangeville	190	206	203	15	149	21	140	11	88	88
61 Oshawa	160	171	146	14	111	42	133	3	8	90
62 Paris	125	97	97	9	45	14	72	5	84	84
63 Parkhill	153	175	160	23	45	8	79	3	104	104
64 Pembroke	146	152	152	4	110	15	128	.....	2	108
65 Penetanguishene	60	54	45	.....	60	2	49	.....	36	36
66 Petrolea	165	180	180	15	70	5	156	2	119	119
67 Picton	198	201	147	9	147	49	145	3	98	98
68 Plantagenet	65	65	65	.....	65	.....	20	.....	.....	65
69 Port Arthur	101	72	69	1	80	8	70	2	55	55
70 Port Dover	69	69	57	.....	11	.....	51	.....	37	32
71 Port Elgin	84	89	89	5	27	8	75	1	60	60
72 Port Hope	200	197	197	29	167	39	178	3	10	47
73 Port Perry	117	110	107	11	63	9	62	4	45	45
74 Port Rowan	51	70	70	.....	29	.....	43	.....	.....	51
75 Prescott	113	119	62	5	50	3	58	.....	42	42
76 Richmond Hill	94	103	56	10	60	.....	70	.....	5	50
77 Rockland	66	67	64	.....	63	.....	40	.....	.....	.....
78 Sault Ste. Marie	168	173	173	3	86	1	143	.....	153	153
79 Simcoe	171	105	90	16	70	25	100	3	93	95
80 Smith's Falls	158	171	171	13	108	13	149	.....	115	115
81 Smithville	79	79	48	.....	15	.....	30	.....	50	50
82 Stirling	66	71	71	7	20	.....	69	.....	32	32
83 Streetsville	56	63	40	.....	42	1	56	.....	21	21
84 Sydenham	121	121	121	.....	86	9	102	.....	80	80
85 Thorold	90	84	84	.....	50	.....	50	.....	78	78
86 Tillsonburg	149	152	153	14	77	8	102	2	112	112
87 Toronto Technical	679	377	164	32	594	.....	.....	.....	.....	.....
88 Trenton	152	138	85	17	64	13	116	.....	39	37
89 Uxbridge	138	151	107	13	91	25	85	2	96	96
90 Vienna	35	34	34	1	4	.....	21	.....	26	26
91 Walkerton	125	121	98	17	38	49	111	4	58	57
92 Wardsville	43	43	30	.....	12	.....	26	.....	.....	33
93 Waterdown	91	107	107	12	80	80	103	2	107	57
94 Waterford	92	97	97	5	45	10	75	1	2	64
95 Watford	156	164	164	24	45	2	151	.....	114	114
96 Welland	205	212	143	12	124	28	144	3	152	152
97 Weston	102	97	97	.....	95	13	90	.....	54	50
98 Wiarton	108	112	112	4	22	.....	100	.....	72	72
99 Williamstown	98	98	63	.....	47	.....	79	4	80	80
100 Wingham	128	129	129	1	15	.....	129	1	87	87
1 Totals, High Schools	12,153	12,598	10,869	776	7,245	1,028	9,160	147	5,762	7,423
2 Totals, Collegiate Institutes	14,136	13,732	10,803	1,168	9,334	2,565	10,602	531	6,502	7,084
3 Grand totals, 1906	26,289	26,330	21,672	1,944	16,579	3,593	19,762	678	12,264	14,507
4 Grand totals, 1905	25,455	23,847	22,123	1,913	16,430	3,366	19,409	603	10,473	13,569
5 Increases	834	2,483	.....	31	149	227	353	75	1,791	938
6 Decreases	.....	.....	451	.....	.....	.....	.....	.....	.....	.....
7 Percentages	89.44	89.58	73.73	6.61	56.41	12.22	67.23	2.31	41.72	49 36

AND HIGH SCHOOLS.—*Continued.*

and in the various subjects, etc.—*Concluded.*

	Number of Pupils in the various subjects.—*Concluded.*									Special Courses.					
	Chemistry.	Physics.	Mineralogy.	Writing.	Bookkeeping.	Stenography.	Typewriting.	Art.	Physical Education.	Commercial.	Agriculture.	Manual Training.	Household Science.	Arithmetic and English Grammar.	Art.
58	60	84	.....	32	78	32	32	80	.....	32	.....	.....	.....	23	.....
59	50	57	.....	26	26	.....	.....	.....	.....	.....	.....	.....	.....	12	.....
60	120	163	2	88	88	.....	.....	123	.....	.....	.....	.....	.....	70	.....
61	35	158	6	131	92	39	40	65	15	.....	.....	.....	.....	.....	.....
62	48	84	4	80	75	38	38	79	.....	21	.....	.....	.....	10	.....
63	69	77	8	96	60	30	65	96	.....	30	.....	.....	.....	57	.....
64	72	150	.....	76	79	.....	.....	76	.....	.....	.....	.....	.....	22	.....
65	48	48	.....	48	48	40	48	48	60	.....	.....	.....	.....	12	.....
66	100	174	119	89	89	.....	15	113	.....	.....	.....	.....	.....	.....	.....
67	133	138	.....	59	59	19	15	84	.....	15	.....	.....	.....	70	.....
68	65	65	.....	65	65	.....	.....	65	.....	.....	.....	.....	.....	.....	.....
69	70	70	.....	58	70	35	35	90	.....	35	.....	.....	.....	18	.....
70	57	69	.....	12	29	.....	30	39	.....	.....	.....	.....	.....	32	.....
71	45	89	.....	40	40	.....	.....	40	.....	.....	.....	.....	.....	17	.....
72	136	122	10	85	85	64	64	61	.....	.....	.....	.....	.....	.....	.....
73	55	81	.....	60	65	.....	.....	66	114	.....	.....	.....	.....	19	19
74	46	74	.....	51	26	.....	.....	60	.....	.....	.....	.....	.....	23	.....
75	29	49	2	44	52	35	26	54	.....	35	.....	.....	.....	27	.....
76	24	98	6	46	70	.....	5	70	.....	.....	.....	.....	.....	.....	.....
77	15	52	.....	52	66	.....	.....	66	.....	.....	.....	.....	.....	.....	.....
78	170	171	.....	122	121	61	.....	151	.....	.....	.....	.....	.....	3	.....
79	130	170	6	90	90	.....	.....	90	60	.....	.....	.....	.....	3	.....
80	76	131	3	84	84	.....	.....	84	.....	.....	.....	.....	.....	40	.....
81	48	79	.....	31	50	.....	.....	50	.....	.....	.....	.....	.....	29	.....
82	53	71	.....	29	29	.....	.....	29	.....	29	.....	.....	.....	35	29
83	40	44	.....	26	24	12	13	39	.....	9	.....	.....	.....	26	.....
84	59	121	.....	62	62	.....	.....	62	.....	.....	.....	.....	.....	.....	.....
85	28	78	.....	62	62	62	25	62	.....	.....	.....	.....	.....	28	.....
86	98	155	9	64	64	.....	.....	108	.....	.....	.....	.....	.....	57	.....
87	228	213	.....	405	405	405	276	270	.....	405	.....	.....	299	.....	270
88	126	137	7	57	84	29	11	34	.....	29	.....	.....	.....	37	.....
89	138	143	.....	42	42	.....	.....	93	152	.....	.....	.....	.....	45	.....
90	27	35	.....	12	18	5	.....	26	10	.....	.....	.....	.....	15	.....
91	77	100	.....	74	40	18	16	57	.....	17	.....	.....	.....	29	36
92	30	43	.....	33	33	.....	.....	33	.....	.....	.....	.....	.....	.....	.....
93	45	107	.....	50	50	.....	.....	50	.....	.....	.....	.....	.....	45	.....
94	33	103	.....	32	32	.....	.....	59	.....	.....	.....	.....	.....	33	.....
95	114	164	6	94	58	15	.....	94	.....	.....	.....	.....	.....	45	.....
96	92	220	.....	54	93	.....	.....	150	.....	.....	.....	.....	.....	45	.....
97	60	95	.....	40	40	1	5	40	.....	.....	.....	.....	.....	10	.....
98	56	56	.....	50	72	.....	.....	72	.....	.....	.....	.....	.....	40	.....
99	98	98	.....	65	65	.....	.....	65	.....	.....	.....	.....	.....	18	.....
100	106	130	9	31	31	.....	.....	79	.....	.....	.....	.....	.....	48	.....
1	7,910	11,300	420	6,677	6,610	1,611	1,323	7,159	2,316	862	.....	36	299	3,088	356
2	5,689	10,567	326	7,422	6,079	2,486	1,806	6,505	12,448	1,681	.....	1,133	1,087	2,365	1,000
3	13,599	21,867	746	14,099	12,689	4,097	3,129	13,664	14,764	2,543	.....	1,169	1,386	5,453	1,356
4	12,413	21,901	89	14,474	13,152	4,557	3,345	13,641	14,705	2,928	.....	1,286	1,550	4,858	489
5	1,186	.....	657	.....	.....	.....	.....	23	59	.....	.....	.....	.....	595	867
6	.....	34	.....	375	463	460	216	.....	.....	385	.....	117	164	.....	.....
7	46.27	74.4	2.54	47.97	43.17	13.94	10.64	46.49	50.23	8.65	.....	398	471	1,855	4.61

COLLEGIATE INSTITUTES AND

III.—Table K.—

Collegiate Institutes.	Brick, stone or frame school house.	Number of acres in play ground.	Schools under United Board.	Equipment.							
				Value of library.	Value of typewriters.	Value of scientific apparatus.	Value of charts, maps and globes.	Value of models for drawing.	Value of gymnasium (not including equipment.)	Value of equipment of gymnasium.	Value of museum, aquarium, etc.
				$	$	$	$	$	$	$	$
1 Aylmer	B	4¼	..	661	.....	689	140	33	680	85	500
2 Barrie	B	3	..	620	180	750	136	5	1,730	90	.....
3 Berlin	B	4	..	775	1,055	1,394	115	20	1,000	496	500
4 Brantford	B	¼	..	731	215	894	108	27	1,000	117	20
5 Brockville	S	3	..	850	112	1,241	191	10	.....	.....	25
6 Chatham	B	2	..	811	500	1,564	153	14	.....	129	.....
7 Clinton	B	3¼	..	651	125	765	128	5	700	63	.....
8 Cobourg	B	1	..	893	480	843	146	8	3,000	160	.....
9 Collingwood	B	½	1	715	150	647	96	8	1,200	62	.....
10 Galt	S	8½	..	1,000	367	1,213	67	9	1,200	174	30
11 Goderich	B	¼	..	722	270	554	71	20	2,500	235	.....
12 Guelph	S	4	1	1,033	285	1,271	164	12	2,500	557	175
13 Hamilton	B & S	½	1	1,063	90	1,848	209	25	*.....	909	200
14 Ingersoll	B	2	1	697	180	767	121	4	811	231	25
15 Kingston	B	2 1/16	1	808	600	633	64	25	.....	.....	100
16 Lindsay	B	2	1	1,461	250	1,186	149	9	600	126	60
17 London	B	3	1	972	560	2,869	173	43	*.....	540	700
18 Morrisburg	B	2½	1	689	207	1,265	157	17	980	188	150
19 Napanee	B	3½	1	949	245	937	122	20	800	251	.....
20 Niagara Falls	B	5¾	..	827	315	739	112	25	1,063	126	42
21 Orillia	B	2	..	642	270	697	113	70	1,800	278	.....
22 Ottawa	S	1½	..	1,403	1,226	1,847	292	150	.....	285	.....
23 Owen Sound	B	2	1	1,439	225	1,935	129	20	3,000	25	35
24 Perth	B	4	1	868	.....	821	155	10	560	267	500
25 Peterborough	B	2	1	725	265	1,026	159	25	.....	.....	.....
26 Renfrew	B	3⅛	1	614	150	779	70	12	.....	.....	.....
27 Ridgetown	B	1¾	..	703	180	1,209	143	48	900	90	25
28 St. Catharines	B	1¾	..	631	270	918	135	18	900	70	100
29 St. Mary's	B	4	..	744	140	699	120	25	700	84	.....
30 St. Thomas	B	2¼	1	1,031	660	1,205	110	18	1,323	374	.....
31 Sarnia	B	2½	1	694	315	926	127	12	1,380	168	.....
32 Seaforth	B	2¾	..	760	180	829	125	15	600	65	9
33 Stratford	B	10	..	1,041	450	1,210	220	26	.....	116	600
34 Strathroy	B	1¼	..	958	180	895	116	28	380	104	25
35 Toronto (Harbord)	B	1½	1	1,389	.....	2,578	175	28	4,000	700	.....
36 Toronto (Jameson)	B	1½	1	1,797	30	2,527	155	15	5,000	790	.....
37 Toronto (Jarvis)	B	1¾	1	1,396	.....	2,014	176	38	3,500	180	200
38 Toronto Junction	B	6	..	1,087	270	924	112	32	.....	.....	.....
39 Vankleek Hill	B	3	..	617	180	736	46	13	3,000	236	10
40 Whitby	B	½	1	631	.....	592	115	10	850	209	.....
41 Windsor	B	2⅞	1	1,074	967	982	130	39	3,000	200	300
42 Woodstock	B	1	..	1,103	855	1,523	51	15	1,000	180	80
Totals			20	38,275	12,999	48,941	5,596	1,006	51,657	8,960	4,411

*Gymnasium is part of main building.

HIGH SCHOOLS.—*Continued.*

Miscellaneous Information.

	Religious and other Exercises.					Destination of Pupils.					
	Schools using authorized Scripture readings.	Schools opened with prayer.	Schools closed with prayer.	Schools using Bible.	Commencement exercises.	Number who entered mercantile life.	Number who became occupied with agriculture.	Number who entered the professions of law, medicine, and the Church.	Number who became teachers.	Number who entered any other profession.	Number who left for other occupations.
1	.....	1	.....	.....	1	5	11	1	11	3	23
2	.....	1	.....	.....	.....	8	2	4	14	2	14
3	.....	1	.....	1	1	64	4	.....	7	35	5
4	.....	1	.....	1	.....	53	10	8	15	7	18
5	.....	1	.....	.....	1	12	3	6	14	16	55
6	1	1	.....	1	.....	45	4	1	24	6	41
7	1	1	.....	1	1	15	5	.....	13	.....	22
8	.....	1	.....	.....	1	20	9	4	12	10	7
9	.....	1	.....	.....	.....	15	7	8	17	7	23
10	1	1	.....	.....	1	15	7	2	14	9	31
11	1	1	.....	.....	1	19	3	4	30	3	35
12	.....	1	.....	.....	1	15	2	3	9	10	13
13	1	1	.....	1	1	80	35	12	48	15	31
14	1	1	.....	1	1	13	5	.....	5	.....	33
15	1	1	1	1	.....	39	7	6	8	8	106
16	.....	1	.....	.....	1	32	3	8	28	4	29
17	.....	1	.....	.....	.....	129	17	14	43	17	126
18	1	1	.....	.....	1	10	7	3	20	3	20
19	1	1	.....	1	1	6	21	1	13	3	16
20	1	1	.....	1	1	.....	6	2	6	8	49
21	1	1	.....	1	.....	6	2	3	13	6	37
22	1	1	1	1	1	46	.....	22	20	31	77
23	.....	1	.....	.....	1	33	8	10	52	9	45
24	1	1	.....	.....	1	13	3	.....	8	3	19
25	.....	1	.....	.....	.....	26	3	2	14	6	16
26	1	1	1	.....	1	17	12	10	18	5	18
27	.....	1	.....	.....	1	10	18	4	11	4	20
28	1	1	.....	.....	1	52	16	6	9	9	25
29	.....	1	.....	.....	1	6	14	5	16	7	24
30	.....	1	.....	.....	.....	74	28	15	8	7	20
31	1	1	.....	.....	1	21	7	3	10	3	54
32	1	1	.....	.....	.....	13	3	6	21	1	15
33	1	1	.....	.....	1	41	5	6	16	5	22
34	1	1	.....	.....	.....	14	5	4	19	3	12
35	.....	1	.....	1	1	100	.....	15	15	.....	49
36	1	1	.....	.....	1	31	.....	12	18	10	65
37	1	1	.....	1	1	45	.....	14	15	20	55
38	1	1	.....	.....	1	35	4	12	11	9	36
39	.....	1	.....	1	1	10	3	4	15	2	20
40	.....	1	.....	1	1	6	4	1	10	3	12
41	.....	.....	.....	.....	1	25	.....	8	5	10	60
42	.....	1	.....	.....	1	21	5	3	20	6	57
	22	41	3	15	31	1,240	308	252	695	319	1,455

COLLEGIATE INSTITUTES AND

III.—Table K.—

High Schools.	Brick, stone or frame school house.	Number of acres in play ground.	Schools under United Board.	Equipment.							
				Value of library.	Value of typewriters.	Value of scientific apparatus.	Value of charts, maps and globes.	Value of models for drawing.	Value of gymnasium (not including equipment.)	Value of equipment of gymnasium.	Value of museum, aquarium, etc.
				$	$	$	$	$	$	$	$
1 Alexandria	B	1⅙		383		453	85	23			
2 Almonte	S	1	1	802	135	488	78	12			
3 Arnprior	B	1	1	308		345	89	16		38	
4 Arthur	B	2½		335	95	678	38	31		13	
5 Athens	S	2		525		477	69	10		4	
6 Aurora	B	3		435		459	69	8			
7 Beamsville	B	½	1	333		332	70	6			
8 Belleville	B	1½	1	352		570	162	37			
9 Bowmanville	B	3		505		527	42	8			
10 Bradford	B	3		333	35	370	49	42		15	
11 Brampton	B	5		454	65	643	66	34		10	
12 Brighton	B	2/5	1	270		19	42	10			
13 Caledonia	B	2	1	512		494	33	4			
14 Campbellford	B	1	1	376		554	34				16
15 Carleton Place	S	1	1	723		354	65	8		3	
16 Cayuga	B	1		220		376	23	18		40	
17 Chesley	B	5		301		342	49			5	5
18 Colborne	B	¾	1	268		381	117	5			
19 Cornwall	B	1		526	455	652	126	13			
20 Deseronto	B	3		371		403	87	4	300	210	50
21 Dundas	B	4	1	533	95	650	109	20		39	50
22 Dunnville	B	1½		356		618	64	10			
23 Dutton	B	1		222		474	31				
24 East Toronto	B			292		296	30	6			
25 Elora	S	½	1	248	45	314	43	2			
26 Essex	B	3¼		344		429	68	28	500	205	50
27 Fergus	S	1	1	368		317	79	9			
28 Forest	B	1½		317		443	94	22			
29 Fort William	B	½		309	105	286	57	3			
30 Gananoque	B	1	1	626	145	579	114	19			
31 Georgetown	B	4		266	65	457	76	10		5	65
32 Glencoe	B	2		429		532	90	30		12	45
33 Gravenhurst	B	7½		269		391	5				
34 Grimsby	B	3	1	208		269	29	10			
35 Hagersville	B	1½		341		545	54	28			
36 Harriston	B	3	1	97	37	357	26			4	
37 Hawkesbury	B	2	1	179		248	25				
38 Iroquois	B	¾		664	50	1,231	142	18		26	275
39 Kemptville	B	2	1	336	30	425	68			18	
40 Kenora	B	1½	1	279		476	53	20			10
41 Kincardine	B	4	1	621	530	744	82	34	800	27	27
42 Leamington	B	1¼		328		399	91	32		10	
43 Listowel	B	2½		352		518	55	10	250	42	
44 Lucan	B	3		302	90	592	73	21			25
45 Madoc	B	1		169		586	90	9			
46 Markham	B	2¼		280		916	55	38		13	
47 Meaford	B	2½		380	630	564	81	7	1,250	239	
48 Midland	B	6		345	90	731	25				
49 Mitchell	B	¾		248		522	64	21	566	212	
50 Mount Forest	B	2½		451		599	43			10	
51 Newburgh	S	1½	1	497		381	85	2			
52 Newcastle	B	2	1	269		326	52	4			
53 Newmarket	B	1½		230	213	582	74	23	350	97	
54 Niagara	B	1		177	100	156	66	16		9	10
55 Niagara Falls, South	B	2		286	95	356	41	3		30	
56 North Bay	B	2		15	360	325					
57 Norwood	B	8	1	362		337	18	2			
58 Oakville	B	1½	1	278	150	282	59	3			
59 Onemee	B	¾	1	2		144	14				
60 Orangeville	B	2½		639		569	92	26			45

HIGH SCHOOLS.—*Continued.*

Miscellaneous Information.—*Continued.*

	Religious and other Exercises.					Destination of Pupils.					
	Schools using authorized Scripture readings.	Schools opened with prayer.	Schools closed with prayer.	Schools using Bible.	Commencement exercises.	Number who entered mercantile life.	Number who became occupied with agriculture.	Number who entered with professions of law, medicine, and the church.	Number who became teachers.	Number who entered any other profession.	Number who left for other occupations.
1	.....	1	.....	.....	.....	6	7	2	9	1	4
2	.....	1	.....	1	1	12	2	1	6	2	16
3	.....	1	.....	.....	.....	6	.....	1	16	2	16
4	.....	1	.....	.....	1	16	9	3	14	3	11
5	1	1	.....	.....	1	2	6	6	20	2	10
6	1	1	.....	1	1	4	2	2	8	1	.....
7	.....	1	.....	.....	.....	3	4	.....	7	.....	.....
8	.....	1	.....	1	.....	50	7	2	7	5	24
9	.....	1	.....	1	.....	5	7	2	10	1	12
10	.....	1	.....	1	1	8	5	5	8	2	6
11	.....	1	.....	.....	1	9	20	5	5	.....	6
12	1	1	.....	1	1	6	6	.....	4	2	9
13	.....	1	.....	.....	1	5	4	1	5	.....	6
14	.....	1	.....	.....	.....	6	10	1	8	3	5
15	.....	1	.....	.....	1	10	.....	.....	16	.....	19
16	.....	1	.....	.....	1	2	3	.....	8	.....	4
17	.....	1	.....	1	1	5	5	1	12	3	13
18	1	1	.....	.....	.....	4	3	.....	1	1	9
19	1	1	.....	.....	.....	29	22	.....	7	6	31
20	.....	.....	.....	.....	.....	11	1	2	8	4	17
21	.....	1	.....	.....	1	9	8	1	7	3	20
22	.....	1	.....	.....	.....	10	8	1	7	.....	13
23	.....	1	.....	.....	1	10	11	2	20	.....	6
24	.....	1	.....	.....	1	13	2	3	1	2	9
25	1	1	.....	1	.....	.....	3	1	7	5	15
26	1	1	.....	.....	1	7	7	1	15	1	10
27	.....	1	.....	.....	1	4	3	1	10	2	8
28	.....	1	.....	.....	.....	3	10	3	6	3	13
29	.....	1	.....	.....	.....	13	1	.....	2	.....	44
30	1	1	.....	.....	1	16	.....	.....	5	3	15
31	1	1	.....	.....	1	5	1	1	12	.....	14
32	.....	1	.....	1	1	8	6	1	10	6	6
33	1	1	.....	.....	1	7	.....	1	4	1	7
34	1	1	.....	.....	1	6	3	.....	1	2	4
35	.....	1	.....	1	.....	5	13	1	6	.....	6
36	1	1	.....	.....	.....	8	4	.....	9	.....	18
37	.....	1	.....	1	.....	2	2	.....	5	1	16
38	1	1	.....	.....	1	6	9	2	8	.....	5
39	.....	1	1	.....	.....	5	6	8	30	6	10
40	.....	1	.....	.....	.....	3	.....	1	.....	5	14
41	.....	1	.....	1	1	28	8	2	11	3	2
42	1	1	1	.....	.....	4	2	5	6	5	1
43	.....	1	.....	.....	.....	7	3	3	21	1	20
44	.....	1	.....	.....	1	8	2	2	9	10	14
45	1	1	.....	1	.....	2	5	.....	8	1	4
46	1	1	.....	1	.....	13	5	3	15	22	7
47	.....	1	.....	1	1	5	4	.....	19	7	12
48	.....	1	.....	.....	.....	8	3	1	3	2	25
49	1	1	.....	.....	1	10	2	.....	4	1	16
50	1	1	.....	1	1	2	4	1	16	.....	5
51	.....	1	.....	.....	.....	2	3	1	13	5	.....
52	1	1	.....	.....	.....	5	7	.....	2	1	6
53	.....	1	.....	1	1	3	1	1	6	2	22
54	.....	1	.....	.....	1	1	4	.....	2	.....	4
55	.....	1	.....	.....	.....	9	2	.....	.....	.....	22
56	.....	1	.....	1	.....	4	1	7	3	1	15
57	.....	1	.....	1	1	6	8	.....	15	.....	8
58	1	1	.....	.....	1	15	6	3	2	2	15
59	.....	1	.....	.....	1	1	2	.....	12	.....	5
60	.....	1	.....	.....	1	11	8	1	21	4	17

COLLEGIATE INSTITUTES AND

III.—Table K.—

High Schools.	Brick, stone or frame school house.	Number of acres in play ground.	Schools under United Board.	Equipment. Value of library.	Value of typewriters.	Value of scientific apparatus.	Value of charts, maps and globes.	Value of models for drawing.	Value of gymnasium (not including equipment.)	Value of equipment of gymnasium.	Value of museum, aquarium, etc.
				$	$	$	$	$	$	$	$
61 Oshawa	B	3	1	280	200	447	108	14	.....	220	5
62 Paris	B	4	1	386	142	673	108	9	.....	.....	.....
63 Parkhill	B	3	1	344	350	514	120	3	.....	44	.....
64 Pembroke	B	¾	1	294	.....	568	94	15	.....	.....	25
65 Penetanguishene	B	10	.....	300	250	552	61	22	.....	.....	25
66 Petrolea	B	2⅛	.....	407	90	622	44	5	.....	.....	50
67 Picton	B	3	.....	708	450	689	118	45	.....	.....	.....
68 Plantagenet	B	1	.....	145	.....	50	17	.....	.....	.....	.....
69 Port Arthur	B	3	1	358	180	487	102	15	.....	.....	.....
70 Port Dover	B	1	1	400	100	437	50	20	.....	7	.....
71 Port Elgin	B	1¼	.....	242	.....	404	48	30	.....	.....	.....
72 Port Hope	B	1½	.....	565	350	747	96	8	.....	.....	200
73 Port Perry	B	3	1	287	.....	457	46	8	200	28	10
74 Port Rowan	B	2½	1	110	.....	193	40	6	.....	.....	.....
75 Prescott	B	1⅞	1	287	120	370	112	18	.....	29	.....
76 Richmond Hill	B	1½	1	189	65	316	54	35	.....	3	.....
77 Rockland	B	3	.....	250	.....	75	.....	.....	.....	.....	15
78 Sault Ste. Marie	B	.....	.....	271	.....	306	35	18	.....	.....	.....
79 Simcoe	B	5	1	397	.....	781	140	29	.....	.....	50
80 Smith's Falls	B	¾	1	578	110	495	67	5	.....	.....	.....
81 Smithville	B	2	.....	130	.....	337	40	.....	.....	.....	.....
82 Stirling	B	1	1	218	.....	315	42	10	.....	.....	.....
83 Streetsville	B	.....	.....	242	90	254	71	3	.....	.....	25
84 Sydenham	S	1½	.....	374	.....	340	37	.....	.....	.....	25
85 Thorold	B	2¼	.....	273	180	493	142	3	.....	.....	.....
86 Tillsonburg	B	2½	.....	281	.....	503	84	2	.....	11	120
87 Toronto Technical	B	½	1	520	680	6,778	44	594	.....	.....	30
88 Trenton	B	1	1	570	155	400	76	7	.....	.....	.....
89 Uxbridge	B	¾	1	349	.....	320	84	4	.....	.....	.....
90 Vienna	B	5½	1	477	15	243	105	10	.....	6	.....
91 Walkerton	B	1¼	.....	366	180	541	54	3	.....	7	8
92 Wardsville	B	2	1	224	.....	191	22	35	.....	.....	.....
93 Waterdown	S	3¼	1	229	.....	334	58	15	.....	.....	.....
94 Waterford	B	3	.....	404	.....	422	94	.....	.....	.....	.....
95 Watford	B	2	.....	345	100	420	110	47	.....	.....	.....
96 Welland	B	1	.....	238	.....	606	32	.....	.....	.....	.....
97 Weston	B	½	.....	280	50	459	105	15	.....	.....	.....
98 Wiarton	S	2	.....	320	.....	302	53	.....	.....	.....	.....
99 Williamstown	S & B	3	.....	34	.....	361	101	10	.....	.....	.....
100 Wingham	B	3	.....	125	.....	365	12	.....	.....	.....	.....
1 Totals, High Schools	.....	.....	43	$31,043	$ 7,472	$51,030	$ 6,636	$1,838	$ 4,216	$ 1,691	$1,250
2 Totals, Collegiate Insts.	.....	.....	20	38,275	12,999	48,941	5,596	1,006	51,657	8,960	4,411
3 Grand Totals 1906	.....	.....	63	$72,318	$20,471	$99,971	$12,232	$2,844	$55,873	$10,651	$5,661
4 Grand Totals 1905	.....	.....	61	59,206	17,490	95,599	12,120	2,561	53,541	10,839	5,459
5 Increases	.....	.....	2	$13,112	$2,981	$4,372	$112	$283	$2,332	.....	$202
6 Decreases	.....	.....	.....	.....	.....	.....	.....	.....	.....	$188	.....
7 Percentages	.....	.....	44.36	.....	.....	.....	.....	.....	.....	.....	.....

HIGH SCHOOLS.—*Concluded.*

Miscellaneous Information.—*Concluded.*

	Religious and other Exercises.					Destination of Pupils.					
	Schools using authorized Scripture readings.	Schools opened with prayer.	Schools closed with prayer.	Schools using Bible.	Commencement exercises.	Number who entered mercantile life.	Number who became occupied with agriculture.	Number who entered the professions of law, medicine, and the church.	Number who became teachers.	Number who entered any other profession.	Number who left for other occupations.
61	1	1	.....	.....	.....	19	10	2	4	1	6
62	1	1	.....	.....	1	19	6	3	3	1	7
63	.....	1	.....	.....	1	8	.....	1	21	1	6
64	.....	1	.....	.....	1	18	4	6	7	.....	12
65	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
66	1	1	.....	1	.....	18	10	1	5	.....	14
67	.....	1	.....	.....	.....	.....	.....	.....	13	.....	.....
68	.....	1	1	.....	.....	.....	.....	.....	14	.....	.....
69	.....	1	.....	.....	1	24	1	.....	5	1	9
70	1	1	.....	.....	1	8	7	2	2	1	1
71	1	1	.....	1	1	10	5	2	10	.....	13
72	1	1	.....	.....	1	7	3	2	29	.....	22
73	.....	1	.....	.....	1	12	7	3	3	2	7
74	1	1	.....	.....	.....	6	1	2	2	.....	12
75	.....	1	.....	.....	1	4	1	.....	5	2	13
76	1	1	.....	1	1	4	5	.....	3	6	22
77	.....	1	.....	1	.....	.....	15	1	.....	12	.....
78	.....	1	.....	.....	1	4	.....	2	10	3	17
79	1	1	.....	1	1	14	6	.....	9	6	11
80	.....	1	.....	.....	1	20	8	.....	16	5	19
81	.....	1	1	1	1	2	7	.....	5	.....	14
82	.....	1	.....	1	.....	5	1	.....	6	.....	1
83	1	1	.....	.....	.....	2	8	.....	7	3	10
84	.....	1	.....	1	1	3	1	.....	10	.....	11
85	1	1	.....	1	1	5	6	3	4	3	7
86	.....	1	.....	.....	.....	8	3	.....	10	3	24
87	.....	1	.....	.....	1	185	4	.....	.....	.....	329
88	1	1	.....	.....	1	13	14	2	3	5	11
89	1	1	1	.....	1	21	6	1	10	2	9
90	1	1	1	.....	1	2	2	.....	4	1	5
91	1	.....	.....	.....	1	3	2	.....	8	2	18
92	.....	1	.....	.....	.....	7	.....	.....	4	.....	90
93	.....	1	.....	.....	.....	5	4	6	12	5	5
94	.....	1	.....	.....	.....	5	3	4	4	.....	12
95	.....	.....	.....	.....	1	3	5	1	16	.....	6
96	.....	1	.....	.....	1	12	5	.....	15	4	30
97	.....	1	.....	1	1	13	4	1	3	.....	10
98	.....	1	.....	.....	1	15	2	2	8	3	3
99	.....	1	.....	.....	.....	2	5	.....	3	1	3
100	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
1	35	96	6	29	58	989	471	139	825	218	1,480
2	22	41	3	15	31	1,240	308	252	695	319	1,455
3	57	137	9	44	89	2,229	779	391	1,520	537	2,935
4	55	185	7	43	97	1,949	859	404	1,305	457	2,900
5	2	2	2	1	.....	280	.....	.....	215	80	35
6	.....	.....	.....	.....	8	.....	80	13	.....	.....	.....
7	40.1	96.4	6.3	30.9	62.7	26.56	9.28	4.66	18.11	6.4	34.98

TABLE L.—PROTESTANT SEPARATE SCHOOLS.

	No. 9 Cambridge.	No. 6 North Plantagenet.	No. 1 North Tilbury.	L'Orignal, Village.	Penetanguishene, Town.	Totals.
Number of Schools	1	1	1	1	1	5
Receipts:	$ c	$ c.	$ c.	$ c.	$ c.	$ c.
Balances from 1905	12 75	46 97	282 32	40 82	118 60	501 46
Government grants	16 80	13 63	11 07	15 70	107 50	164 70
Municipal grants & assessments	93 43	460 00	306 25	458 20	2,675 00	3,992 88
Other sources	.....	.....	60 00	4 92	4 50	69 42
Totals	122 98	520 60	659 64	519 64	2,905 60	4,728 46
Expenditure:						
Teachers' salaries	110 00	225 00	281 43	430 47	1,828 66	2,875 56
School sites and buildings	.....	.....	131 50	.....	266 75	398 25
Libraries, maps, apparatus, etc.	.....	.....	.....	.....	.....	.....
Other expenses	12 25	231 85	126 01	81 35	781 09	1,232 55
Totals	122 25	456 85	538 94	511 82	2,876 50	4,506 36
Balances on hand	73	63 75	120 70	7 82	29 10	222 10
Teachers:						
Male	.....	.....	.....	.....	1	1
Female	1	1	1	1	3	7
Certificates	Temp.	III	III	II	2 II ; 2 III	3 II ; 4 III ; 1 Temp.
Salaries	$200 00	$275 00	$350 00	$375 00	Male $700 00 Female $400 00	Av. male $700 00 Av. female $343 00
Pupils:						
Total number attending	16	8	26	27	233	310
Boys	9	5	15	18	125	172
Girls	7	3	11	9	108	138
Average attendance	7	3	14	17	140	181
No. in 1st Reader, Part I	2	2	3	2	57	66
" 1st " Part II	5	2	7	7	46	67
" 2nd "	5	1	7	2	56	71
" 3rd "	1	2	4	7	25	39
" 4th "	3	1	5	9	49	67
" 5th or High S. Reader	.....	.....	.....	.....	.....	.....
" Art	16	8	26	27	233	310
" Geography	9	6	16	18	233	282
" Music	16	8	.....	.....	233	257
" Literature	9	8	16	27	233	293
" Composition	9	8	26	18	176	237
" Grammar	3	3	9	16	176	207
" English History	3	1	5	16	49	74
" Canadian History	3	2	9	16	93	123
" Physiology & Hygiene	.....	2	26	16	56	100
" Nature Study	16	8	26	.....	102	152
" Physical Culture	.....	8	26	.....	.....	34
" Agriculture	.....	.....	.....	.....	49	49
Brick, frame or log school house	Log.	Log.	Brick.	Brick.	Brick.	3 Brick ; 2 Log.
Number of maps	5	9	5	12	9	40
Number of globes	.....	1	1	1	1	4

TABLE M.—REPORT ON KINDERGARTENS

Municipality.	No. of Kindergartens.	No. of Teachers.	Directors.	Assistants.	Average Salary Director.	Average Salary Assistant.	No. of Pupils attending.	Average daily attendance.
Cities:					$	$		
Brantford	5	11	5	6	350	227	489	172
Chatham	3	8	3	5	442	300	359	149
Guelph	1	2	1	1	350	150	117	36
Hamilton	14	16	14	2	423	275	1,348	520
Kingston	4	4	4	.....	314	.....	192	137
London	17	33	17	16	456	351	1,470	501
Ottawa	17	31	18	13	451	300	1,353	570
Peterborough	3	6	3	3	433	317	288	103
St. Catharines	1	2	1	1	450	300	81	18
Stratford	3	4	3	1	383	200	330	102
Toronto	45	121	46	75	512	337	6,190	2,138
Towns:								
Aylmer	1	2	1	1	350	150	62	35
Berlin	6	6	6	.....	395	.....	250	186
Cobourg	1	2	1	1	350	100	103	27
Collingwood	1	1	1	.....	375	.....	81	19
Dundas	1	1	1	.....	400	.....	87	49
Galt	1	1	1	.....	475	.....	50	32
Hespeler	1	1	1	.....	375	.....	58	35
Ingersoll	1	1	1	.....	350	.....	84	31
Listowel	1	1	1	.....	325	.....	87	32
Owen Sound	3	6	3	3	323	150	350	130
Picton	1	1	1	.....	315	.....	86	32
Preston	1	1	1	.....	375	.....	59	38
Simcoe	1	1	1	.....	350	.....	93	26
Tillsonburg	1	1	1	.....	350	.....	56	22
Toronto Junction	3	6	3	3	417	300	309	128
Waterloo	1	2	1	1	350	300	63	52
Welland	1	1	1	.....	300	.....	65	19
Totals	139	273	141	132	444	316	14,160	5,339

TABLE N.—REPORT ON NIGHT SCHOOLS.

Municipality.	No. of Night Schools.	Teachers.	Pupils attending.	Average daily attendance.
St. Catharines	1	1	16	2
Toronto	10	17	882	370
Totals	11	18	898	372

TABLE O.—REPORT ON TRUANCY.

Cities.	No. of children otherwise employed during school hours.	No. of cases of truancy reported to the Truant Officer.	No. of notices sent by Truant Officer to parents or guardians.	No. of complaints made before Police Magistrates or J.P's.	No. of convictions.	No. of children not attending any school.
Belleville	.....	85	15	1	.....	.....
Brantford	6	14	8	3	2	.....
Chatham	11	127	69	1	1	.....
Guelph	.....	12	15	.....	.....	3
Hamilton	.....	127	500	46	3	127
Kingston	.....	42	26	2	.....	.....
Niagara Falls	9	49	84	2	2	132
Ottawa	10	299	15	11	.....	.....
Peterborough	.....	40	27	.....	.....	.....
St. Catharines	.....	613	67	1	.....	3
St. Thomas	8	75	50	5	4	.....
Stratford	.....	33	24	.....	.....	.....
Toronto	95	545	88	19	16	.....
Windsor	.....	28	7	.....	.....	.....
Woodstock	.....	6	70	2	.....	2
Towns.						
Almonte	.....	3	80	.....	.....	.....
Arnprior	.....	2	2	.....	.....	.....
Aylmer	.....	16	15	1	1	.....
Barrie	.....	15	1	.....	.....	.....
Berlin	10	10	5	.....	.....	.....
Bowmanville	3	.....	1	.....	.....	.....
Brampton	3	13	13	.....	.....	.....
Brockville	.....	39	39	.....	.....	.....
Carleton Place	.....	20	2	.....	.....	1
Chesley	.....	1	3	.....	.....	.....
Cobourg	.....	.....	12	4	1	.....
Collingwood	2	18	18	.....	.....	.....
Copper Cliff	.....	5	3	3	2	.....
Cornwall	.....	19	19	.....	.....	.....
Dundas	2	77	12	2	2	.....
Durham	2	24	24	.....	.....	.....
Essex	5	18	18	.....	.....	.....
Forest	2	7	3	.....	.....	.....
Galt	2	8	11	1	1	2
Gravenhurst	.....	8	8	.....	.....	.....
Hespeler	.....	8	7	.....	.....	.....
Huntsville	.....	12	12	.....	.....	.....
Ingersoll	.....	6	4	.....	.....	.....
Kenora	2	15	15	4	4	1
Kincardine	.....	4	2	.....	.....	.....
Leamington	.....	14	14	.....	.....	.....
Lindsay	1	56	22	2	.....	.....
Listowel	.....	10	.....	.....	.....	2
Little Current	.....	.....	2	.....	.....	.....
Mattawa	.....	30	30	.....	.....	30
Milton	.....	3	1	1	1	.....
Mitchell	1	10	6	.....	.....	10
Newmarket	2	2	3	.....	.....	2
Niagara	.....	5	1	.....	.....	.....
Oakville	5	3	5	.....	.....	.....
Orangeville	5	13	13	.....	.....	.....
Orillia	.....	.....	.....	1	.....	.....
Owen Sound	14	18	1	.....	.....	.....
Palmerston	.....	2	2	.....	.....	.....

TABLE O.—REPORT ON TRUANCY.—*Concluded.*

Towns.—*Continued.*	No. of children otherwise employed during school hours.	No. of cases of truancy reported to the Truant Officer.	No. of notices sent by Truant Officer to parents or guardians.	No. of complaints made before Police Magistrates or J.P's.	No. of convictions.	No. of children not attending any school.
Paris	.....	6	6	.....	.....	.....
Parkhill	.....	4	1	.....	.....	1
Petrolea	7	65	15	.....	.....	.....
Port Arthur	3	.....	14	.....	.....	.....
Port Hope	.....	6	4	.....	.....	.....
Prescott	2	.....	12	.....	.....	.....
Preston	.....	5	5	.....	.....	.....
Rainy River	1	.....	.....	.....	.....	.....
St. Mary's	.....	8	2	.....	.....	5
Sarnia	1	7	1	2	.....	4
Simcoe	.....	15	12	4	4	.....
Smith's Falls	.....	.....	30	.....	.....	1
Steelton	.....	5	5	.....	.....	.....
Sudbury	1	10	.....	.....	.....	.....
Thorold	.....	.....	13	.....	.....	13
Wallaceburg	.....	10	9	.....	.....	.....
Welland	.....	3	2	.....	.....	.....
Villages.						
Alvinston	.....	1	1	.....	.....	1
Ayr	.....	.....	8	.....	.....	.....
Bayfield	5	12	16	.....	.....	.....
Blyth	.....	85	.....	.....	.....	.....
Bradford	.....	6	1	.....	.....	.....
Brussels	.....	1	.....	.....	.....	.....
Caledonia	.....	23	23	.....	.....	.....
Colborne	.....	2	2	.....	.....	.....
Delhi	.....	7	9	.....	.....	.....
Drayton	.....	.....	1	.....	.....	.....
Dutton	.....	14	14	.....	.....	10
Elora	.....	2	2	.....	.....	.....
Exeter	5	8	5	.....	.....	1
Fergus	.....	5	5	.....	.....	.....
Georgetown	2	10	10	.....	.....	10
Glencoe	.....	.....	2	.....	.....	.....
Markdale	.....	6	6	.....	.....	.....
Marmora	.....	10	4	.....	.....	.....
Merritton	.....	1	.....	.....	.....	.....
Milverton	4	4	4	.....	.....	4
New Hamburg	.....	20	20	.....	.....	.....
Norwood	.....	2	1	1	.....	.....
Oil Springs	.....	5	6	.....	.....	.....
Point Edward	.....	15	15	.....	.....	4
Port Colborne	.....	4	4	.....	.....	.....
Port Rowan	.....	.....	2	.....	.....	.....
Port Stanley	.....	.....	5	.....	.....	.....
Shelburne	.....	2	.....	.....	.....	.....
Streetsville	.....	1	.....	.....	.....	.....
Tara	.....	2	2	.....	.....	.....
Thamesville	.....	1	1	.....	.....	.....
Thedford	.....	.....	.....	.....	.....	3
Tilbury	15	7	7	.....	.....	.....
Watford	.....	3	3	.....	.....	.....
Winchester	.....	2	2	2	1	.....
Totals	246	3,014	1,806	121	45	372

TABLE P.—GENERAL

A General Statistical Abstract, exhibiting the comparative state and progress of Education in also Normal College and Normal and Model Schools, from the year

No.	Subjects compared.	1867.	1872.	1877.	1882.
1	Population	.....	1,620,851	.....	1,926,922
2	School population between the ages of five and sixteen years, up to 1884 (and five to twenty-one subsequently)	447,726	495,756	494,804	483,817
3	High Schools (including Collegiate Institutes)	102	104	104	104
4	Normal College and Normal and Model Schools	3	3	4	6
5	Total Public Schools in operation	4,261	4,490	4,955	5,013
6	Total Roman Catholic Separate Schools	161	171	185	190
7	Grand total of all schools in operation	4,527	4,768	5,248	5,313
8	Total pupils attending High Schools (including Collegiate Institutes)	5,696	7,968	9,229	12,348
9	Total students and pupils attending Normal College, Normal and Model Schools	800	800	900	1,059
10	Total pupils attending Public Schools	382,719	433,256	465,908	445,364
11	Total pupils attending Roman Catholic Separate Schools	18,924	21,406	24,952	26,148
12	Grand total students and pupils attending High, Public, Separate Schools, Normal College, and Normal and Model Schools	408,139	463,430	500,989	484,919
13	Total amount paid for the salaries of Public and Separate School Teachers	$1,093,516	1,371,594	2,038,099	2,144,448
14	Total amount paid for the erection and repairs of Public and Separate School Houses, and for libraries, apparatus, books, fuel, stationery, etc	$379,672	835,770	1,035,390	882,526
15	Grand total paid for Public and Separate School Teachers' salaries, the erection and repairs to School houses, and for libraries, apparatus, etc	$1,473,188	2,207,364	3,073,489	3,026,974
16	Total amount paid for High School (and Collegiate Institute) Teachers' salaries	$94,820	141,812	211,607	253,864
17	Total amount paid for erection and repair of High School (and Collegiate Institute) houses, maps, apparatus, prizes, fuel, books, etc	$19,190	31,360	51,417	89,857
18	Grand total paid for educational purposes as above	$1,587,198	2,380,536	3,336,513	3,370,695
19	Total Public and Separate School Teachers	4,890	5,476	6,468	6,857
20	Total Male Teachers	2,849	2,626	3,020	3,062
21	Total Female Teachers	2,041	2,850	3,448	3,795

STATISTICAL ABSTRACT.

Ontario, as connected with Public, Separate and High Schools (including Collegiate Institutes), 1867 to 1906, compiled from Returns in the Education Department.

No.	1887.	1892.	1897.	1902.	1905.	1906.
1	.....	2,114,321	.....	2,167,938	.....	.....
2	611,212	595,238	590,055	584,512	578,032	595,257
3	112	128	130	134	140	142
4	6	6	7	8	8	8
5	5,277	5,577	5,574	5,671	5,793	5,797
6	229	312	340	391	428	443
7	5,624	6,023	6,051	6,204	6,369	6,390
8	17,459	22,837	24,390	24,472	28,661	29,392
9	1,204	1,270	1,492	1,709	1,499	1,526
10	462,839	448,204	441,157	420,094	410,270	413,290
11	30,373	37,466	41,620	45,964	49,324	50,760
12	511,875	509,777	508,659	492,239	489,754	494,968
13	2,458,540	2,752,628	2,886,061	3,198,132	3,669,230	3,880,548
14	1,283,565	1,301,289	1,329,609	1,627,028	2,492,006	2,522,658
15	3,742,105	4,053,917	4,215,670	4,825,160	6,161,236	6,403,206
16	327,452	470,828	532,837	547,402	666,547	716,471
17	168,160	215,871	183,139	222,278	337,951	312,823
18	4,237,717	4,740,616	4,931,646	5,594,840	7,165,734	7,432,500
19	7,594	8,480	9,128	9,631	9,926	10,053
20	2,718	2,770	2,784	2,311	1,967	1,881
21	4,876	5,710	6,344	7,320	7,959	8,172

APPENDIX B.—

FINANCIAL

Name of Institute.	Number of Institutes.	Number of members.	Receipts.		
			Government grant.	Municipal grant.	Members' fees.
			$ c.	$ c.	$ c.
1 Algoma	1	107	.....	.....	.....
2 Brant	1	150	25 00	25 00	.....
3 Bruce, East	1	122	25 00	.....	.....
4 Bruce, West	1	77	25 00	25 00	18 75
5 Carleton	1	158	25 00	25 00	.....
6 Dufferin	1	36	25 00	25 00	9 00
7 Dundas	1	92	25 00	25 00	23 00
8 Durham	1	120	25 00	25 00	.....
9 Elgin	1	175	.....	.....	.....
10 Essex, North	1	60	25 00	50 00	.....
11 Essex, South	1	114	25 00	50 00	20 75
12 Frontenac	1	150	25 00	25 00	.....
13 Glengarry	1	94	25 00	25 00	.....
14 Grenville	1	106	25 00	25 00	.....
15 Grey, East	1	31	25 00	25 00	.....
16 Grey, South	1	64	25 00	25 00	16 00
17 Grey, West	1	105	25 00	25 00	12 50
18*Haliburton	1	29	25 00	25 00	.....
19 Haldimand	1	123	25 00	25 00	.....
20 Halton	1	95	25 00	25 00	.....
21 Hastings, North	1	123	25 00	25 00	.....
22 Hastings, South	1	136	25 00	25 00	.....
23 Huron, East	1	140	25 00	25 00	.....
24 Huron, West	1	48	25 00	25 00	11 75
25 Kent, East	1	90	25 00	25 00	24 50
26 Kent, West	1	141	25 00	25 00	34 00
27 Lambton, East	1	128	25 00	25 00	23 50
28 Lambton, West	1	124	25 00	25 00	.....
29 Lanark	1	210	25 00	25 00	16 50
30 Leeds, No. 1 (West)	1	100	25 00	25 00	9 25
31 Leeds, No. 2	1	83	25 00	25 00	13 00
32 Lennox and Addington	1	143	25 00	25 00	.....
33 Lincoln	1	86	25 00	25 00	.....
34 Manitoulin	1	72	25 00	.....	.....
35 Middlesex, East	1	102	25 00	85 00	25 50
36 Middlesex, West	1	105	25 00	100 00	53 50
37 Muskoka	1	70	25 00	.....	.....
38 Nipissing	1	41	50 00	.....	10 25
39 Norfolk	1	140	25 00	60 00	20 75
40 Northumberland	1	150	25 00	25 00	.....
41 Ontario, North	1	73	25 00	.....	18 25
42 Ontario, South	1	77	25 00	25 00	.....
43 Oxford	1	100	25 00	.....	25 00
44 Parry Sound, West	1	40	25 00	.....	10 50
45 Parry Sound, East, and N. Muskoka	1	70	50 00	.....	.....
46 Peel	1	98	.....	25 00	.....
47 Perth	1	162	25 00	25 00	81 00

* Statement for 1905 ; Government grant paid in 1906.

TEACHERS' INSTITUTES.

STATEMENT, 1906.

	Receipts.—*Continued.*		Expenditure.				
	Balances and other sources.	Total receipts.	Printing, postage, etc.	Libraries, Educational Journals, etc.	Miscellaneous.	Total expenditure.	Balances.
	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
1	18 00	18 00	6 00	1 95	.....	7 95	10 05
2	96 33	146 33	19 45	28 00	31 05	78 50	67 83
3	83 47	108 47	26 86	17 50	20 60	64 96	43 51
4	204 75	273 50	20 77	85 30	33 10	139 17	134 33
5	86 36	136 36	9 35	.....	85 45	94 80	41 56
6	3 95	62 95	7 50	2 10	43 90	53 50	9 45
7	71 39	144 39	8 63	.....	100 25	108 88	35 51
8	37 05	87 05	13 55	.....	30 85	44 40	42 65
9	215 90	215 90	.....	.....	10 00	10 00	205 90
10	82 81	157 81	6 61	.....	43 00	49 61	108 20
11	97 98	193 73	66 60	.....	46 00	112 60	81 13
12	55 70	105 70	3 95	.....	35 75	39 70	66 00
13	34 56	84 56	18 28	.....	21 72	40 00	44 56
14	72 68	122 68	1 26	.....	29 71	30 97	91 71
15	50 78	100 78	7 75	.....	12 40	20 15	80 63
16	195 00	261 00	5 64	61 00	31 00	97 64	163 36
17	127 54	190 04	38 40	.....	75 65	114 05	75 99
18	22 14	72 14	5 00	.....	8 00	13 00	59 14
19	221 11	271 11	6 45	.....	12 85	19 30	251 81
20	77 38	127 38	9 75	18 50	33 40	61 65	65 73
21	43 15	93 15	7 85	.....	18 39	26 24	66 91
22	173 48	223 48	12 50	.....	37 00	49 50	173 98
23	29 60	79 60	9 30	.....	40 15	49 45	30 15
24	133 04	194 79	29 68	23 00	41 20	93 88	100 91
25	39 43	113 93	6 00	.....	69 00	75 00	38 93
26	64 88	148 88	5 14	60	93 00	98 74	50 14
27	70 65	144 15	39 08	.....	49 25	88 33	55 82
28	91 96	141 96	28 45	.....	27 00	55 45	86 51
29	109 45	175 95	13 90	30 50	34 00	78 40	97 55
30	108 57	167 82	30 57	33 75	46 80	111 12	56 70
31	57 40	120 40	12 65	22 25	40 00	74 90	45 50
32	15 08	65 08	4 75	.....	29 50	34 25	30 83
33	116 17	166 17	7 69	1 30	50 95	59 94	106 23
34	58 60	83 60	8 44	.....	10 00	18 44	65 16
35	20 28	155 78	62 15	42 10	20 50	124 75	31 03
36	111 49	289 99	31 21	.....	162 70	193 91	96 08
37	85 10	110 10	7 05	9 75	17 60	34 40	75 70
38	5 25	65 50	7 50	8 00	17 40	32 90	32 60
39	54 52	160 27	41 49	3 00	59 00	103 49	56 78
40	126 96	176 96	11 45	.....	48 50	59 95	117 01
41	82 57	125 82	5 81	.....	83 55	89 36	36 46
42	117 05	167 05	5 75	.....	38 15	43 90	123 15
43	93 74	143 74	7 75	34 19	57 45	99 39	44 35
44	35 91	71 41	8 50	15 00	.....	23 50	47 91
45	6 01	56 01	3 70	.....	.....	3 70	52 31
46	62 16	87 16	25 00	.....	52 75	77 75	9 41
47	248 60	379 60	29 07	.....	287 05	316 12	63 48

APPENDIX B.—

FINANCIAL

Name of Institute.	Number of Institutes.	Number of members.	Receipts.		
			Government grant.	Municipal grant.	Members' fees.
			$ c.	$ c.	$ c.
48 Peterborough	1	115	25 00	25 00	.....
49 Prescott and Russell	1	85	25 00	25 00	.....
50 Prince Edward	1	90	25 00	25 00	.....
51 Rainy River	1	35	25 00	.....	.....
52 Renfrew	1	160	25 00	25 00	.....
53 Simcoe, East, and W. Muskoka	1	135	25 00	25 00	.....
54 Simcoe, North	1	115	25 00	25 00	25 25
55 Simcoe, South-west	1	47	25 00	25 00	11 75
56 Stormont	1	84	25 00	25 00	41 50
57 Thunder Bay	1	50	25 00	.....	.....
58 Victoria, East	1	85	25 00	37 50	.....
59 Victoria, West	1	75	25 00	25 00	.....
60 Waterloo	1	156	25 00	25 00	68 50
61 Welland	1	148	25 00	25 00	.....
62 Wellington, North	1	71	25 00	.....	17 75
63 Wellington, South	1	86	25 00	25 00	.....
64 Wentworth	1	110	25 00	25 00	.....
65 York, North	1	118	25 00	25 00	5 25
66 York, South	1	70	25 00	25 00	17 50
67*Ontario Educational Associat'n	1	842	1,000 00	.....	421 00
Cities and Towns.					
68 Brantford	1	56	25 00	25 00	.....
69 Brockville	1	30	25 09	25 00	7 50
70 Guelph	1	35	25 00	25 00	.....
71 Hamilton	1	194	25 00	25 00	48 50
72 Kingston	1	57	25 00	25 00	13 50
73 London	1	169	25 00	25 00	103 25
74 London R.C. Separate Schools	1	.....	25 00	.....	.....
75 Ottawa	1	225	25 00	25 00	.....
76 Ottawa Bilingual Schools	1	.....	25 00	.....	.....
77 Peterborough	1	58	25 00	.....	29 00
78 St. Catharines	1	28	25 00	25 00	.....
79 St. Thomas	1	42	25 00	25 00	.....
80 Stratford	1	37	25 00	44 50	53 00
81 Toronto	1	712	25 00	25 00	178 00
82 Windsor and Walkerville	1	50	25 00	25 00	.....
Totals, 1906	82	9,230	3,000 00	1,877 00	1,518 50
Totals, 1905	80	8,958	2,525 00	1,937 00	1,230 65
Increases	2	272	475 00	.....	287 85
Decreases	.....	.....	.....	60 00	.....

* Statement for 1906-7.

TEACHERS' INSTITUTES.—*Concluded.*

STATEMENT, 1906.

	Receipts—*Continued.*		Expenditure.				
	Balances and other sources.	Total receipts.	Printing, postage, etc.	Libraries, Educational Journals, etc.	Miscellaneous.	Total expenditure.	Balances.
	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
48	26 45	76 45	8 80	.....	56 15	64 95	11 50
49	112 12	162 12	9 52	63 00	12 60	85 12	77 00
50	65 13	115 13	3 00	17 23	24 60	44 83	70 30
51	33 10	58 10	4 55	.....	24 75	29 30	28 80
52	78	50 78	6 20	.....	40 65	46 85	3 93
53	27 19	77 19	3 65	75	28 95	33 35	43 84
54	22 70	97 95	9 00	.....	48 02	57 02	40 93
55	83 60	145 35	9 75	27 50	65 00	102 25	43 10
56	82	92 32	6 31	.....	46 30	52 61	39 71
57	25 35	50 35	5 60	14 25	15 00	34 85	15 50
58	88 76	151 26	25 47	.....	15 00	40 47	110 79
59	49 27	99 27	30	14 00	13 50	27 80	71 47
60	59 88	178 38	23 28	.....	110 05	133 33	45 05
61	70 61	120 61	15 12	.....	49 15	64 27	56 34
62	91 52	134 27	16 07	.....	19 00	35 07	99 20
63	75 84	125 84	8 03	.....	67 40	75 43	50 41
64	55 97	105 97	13 22	.....	45 50	58 72	47 25
65	107 98	163 23	13 06	19 25	26 35	58 66	104 57
66	225 05	292 55	26 30	48 00	163 15	237 45	55 10
67	353 46	1,774 46	1,024 27	.....	361 46	1,385 73	388 73
68	25 86	75 86	.....	19 50	4 90	24 40	51 46
69	90 26	147 76	9 15	26 18	87 67	123 00	24 76
70	5 26	55 26	2 11	40 08	5 00	47 19	8 07
71	176 09	274 59	22 91	.....	145 29	168 20	106 39
72	35 08	98 58	1 87	23 23	31 50	56 60	41 98
73	70 71	223 96	10 00	6 45	144 00	160 45	63 51
74	.....	25 00	.....	.....	25 00	25 00	.....
75	210 43	260 43	15 75	3 55	187 75	207 05	53 38
76	.....	25 00	.....	.....	25 00	25 00	.....
77	6 25	60 25	6 20	.....	22 25	28 45	31 80
78	81 90	131 90	.....	18 31	27 75	46 06	85 84
79	66 95	116 95	7 30	16 74	37 55	61 59	55 36
80	33 76	156 26	1 60	92 17	44 50	138 27	17 99
81	967 63	1,195 63	46 75	166 86	301 35	514 96	680 67
82	41 91	91 91	6 29	.....	55 22	61 51	30 40
	7,403 65	13,799 15	2,105 66	1,054 84	4,512 88	7,673 38	6,125 77
	7,911 92	13,604 57	2,118 06	1,054 01	4,443 12	7,615 19	5,989 38
	.....	194 58	.....	83	69 76	58 19	136 39
	508 27	.....	12 40	.....	.....	.....	.....

APPENDIX C.—RURAL SCHOOL LIBRARIES, 1906-7.

Legislative aid was granted to the amount of 18.50 per cent. of the value of all library books approved by the Inspector and purchased between July 1st, 1906, and July 1st, 1907, provided no school received more than $5.00 and no purchase was less than $10.00.

Inspectorate.	Number of schools purchasing books to the amount of $10.00 during the year.	Total amount expended in such schools during the year for books recommended.	Total Government grant.	No. of public school libraries in inspectorate.	No. of libraries established during year.
		$ c.	$ c.		
Algoma	4	90 00	15 55	6	3
Brant	33	683 61	120 54	58	24
Bruce, East	13	267 00	49 39	18	14
Bruce, West	12	240 00	42 55	39	7
Carleton	19	401 93	59 53	54	11
Dufferin	7	119 26	22 10	26	6
Dundas	45	971 00	166 37	68	35
Durham	56	578 00	106 93	61	53
Elgin	31	390 50	72 26	104	.....
Essex, North	13	292 03	51 51	17	13
Essex, South	35	669 57	123 87	38	31
Frontenac	21	337 95	62 52	95	12
Glengarry	5	100 99	18 13	10	4
Grey, East	12	181 54	33 57	14	12
Grey, West	31	595 65	110 19	53	29
Grey, South	14	317 60	54 87	32	13
Haldimand	47	1,112 77	185 67	57	47
Haliburton, etc	.....	.....	.....	30	.....
Halton	10	247 00	39 79	27	9
Hastings, North	52	1,090 63	195 98	98	38
Hastings, South	16	347 05	64 20	16	12
Huron, East	6	70 76	13 07	27	1
Huron, West	28	550 28	100 86	42	22
Kent, East	17	333 80	53 05	34	6
Kent, West	24	327 40	60 55	61	9
Lambton, East	7	131 11	*34 26	44	6
Lambton, West	32	489 55	90 54	43	30
Lanark	11	157 81	29 16	39	3
Leeds and Grenville, No. 1	67	1,255 00	232 14	67	62
Leeds and Grenville, No. 2	33	641 00	118 58	52	31
Leeds and Grenville, No. 3	35	678 54	123 08	39	35
Lennox and Addington	53	1,154 48	195 64	59	52
Lincoln	15	347 57	58 65	59	8
Middlesex, East	29	601 66	100 50	58	20
Middlesex, West	39	810 44	144 55	52	36
Nipissing, etc	1	14 98	2 77	3	3
Norfolk	50	749 32	137 91	74	44
Northumberland	6	136 41	24 73	24	3

* $10.00 of this amount is grant for previous year.

APPENDIX C.—RURAL SCHOOL LIBRARIES, 1906-7.—*Concluded.*

Legislative aid was granted to the amount of 18.50 per cent. of the value of all library books approved by the Inspector and purchased between July 1st, 1906, and July 1st, 1907, provided no school received more than $5.00 and no purchase was less than $10.00.

Inspectorate.	Number of schools purchasing books to the amount of $10.00 during the year.	Total amount expended in such schools during the year for books recommended.	Total Government grant.	No. of public school libraries in inspectorate.	No. of libraries established during year.
		$ c.	$ c.		
Ontario, North	40	730 00	135 05	59	.....
Ontario, South	18	348 45	63 16	40	15
Oxford	34	679 23	120 22	48	28
Parry Sound, West	2	25 00	4 62	30	2
Peel	35	779 24	135 93	45	33
Perth	47	866 68	158 48	91	35
Peterborough	41	704 00	128 24	43	38
Prescott and Russell	12	202 62	37 47	38	7
Prince Edward	42	792 50	146 60	60	33
Renfrew	11	187 65	34 70	22	6
Simcoe, North	19	332 65	58 51	25	12
Simcoe, Southwest	9	204 00	33 54	19	9
Simcoe, East, and West Muskoka	10	338 73	39 68	49	5
Stormont	.....	.....	.....	7	.....
Thunder Bay and Rainy River	27	625 00	98 80	30	24
Victoria, East	3	65 00	11 47	14	3
Victoria, West, and S. E. Muskoka	40	611 17	109 07	62	37
Waterloo, No. 1	15	295 28	51 15	18	9
Waterloo, No. 2	12	259 06	45 44	17	9
Welland	5	80 07	14 93	5	3
Wellington, North	8	143 30	25 55	20	8
Wellington, South	13	297 05	50 48	30	7
Wentworth	16	281 97	51 50	37	4
York, North	8	145 00	23 50	40	8
York, South	30	588 05	108 73	45	23
R. C. Separate Schools, West (Insp. Power)	16	297 26	49 56	36	9
R. C. Separate Schools, Central (Insp. Prendergast)	2	20 00	3 70	4	1
Bilingual Separate Schools, West (Insp. Chenay)	4	79 72	14 73	6	4
Totals 1906-7	1,448	27,462 87	4,870 37	2,638	1,116
Totals 1905-6	.....	9,477 88	4,343 24	1,587	268
Increases	.....	17,984 99	527 13	1,051	848

APPENDIX D.—

Inspectorate.	Name of Principal and Degree, also Assistant when he gives full time to Continuation class work.	Professional Certificate.	No. of Teachers.	Name of School.
Algoma	Wm. J. Osborne	I	4	Bruce Mines
	W. R. Tracey	I	5	Thessalon
	D. A. McDonald, B.A	I	6	Blind River
	Miss M. McKinnon	II	1	1 Aberdeen
	H. Gilmore	II	2	Massey
Brant	A. E. Green	I	4	8 S. Dumfries
	A. Alberta Langs	II	1	20 Brantford
	Charlotte Ballachey	I	1	11 Burford
Bruce, W	Royden J. Fuller	I	7	Paisley
	Geo. B. Bell	I		
	Merlin A. Aldredge	I	8	Southampton
	Nellie Martin	I	5	Teeswater
	Dugald Graham	I	3	10 Huron
	Jos. Stalker	II	5	Lucknow
	Wm. Norman	III	2	Tiverton
	Wm. H. Sharp	II	1	10 Kinloss
	Raymond R. Redmond	III	1	10 Culross
	Edith Richards	III	1	2 Kinloss
	Mary Strathdee	II	1	12 Huron
Carleton	Miss K. Caesar	I	2	5 Fitzroy
	" E. A. Hughes	I	2	5 Gloucester
	" E. Adams	I	3	9 "
	" B. M. Gurney	I	2	5 Goulburn
	" H. M. Peregrine	I	2	7 "
	" E. M. Stewart	I	3	3 N. Gower
	" E. M. Craig	I	2	6 "
	" Sara Hunt, B.A	II	4	3 Huntley
	" M. M. Norton	I	4	11 Osgoode
	" M. E. Norton	I		
	" E. I. Norton	I	3	15 "
	" M. C. Payne	I	4	Ottawa, East
	" L. H. McDougall	I	3	Richmond
	" M. A. White	III	2	8 Fitzroy
	Samuel Acheson	II	2	12 Goulburn
	Miss M. Muir	II	2	3 Marlborough
	" L. M. Ellis	II	2	18 Osgoode
	Hugh Brownlee, B.A	III	8	Hintonburg
	Miss H. M. Bartley	II	2	10 Nepean
Dufferin	A. M. Warner	I	5	Grand Valley
	T. E. Langford, M.A	I	7	Shelburne
	Nellie DeCou, B.A	I		
	W. G. Bain	II	2	2 Melancthon
	Wm. Heath	II	2	17 Mono
Dundas	Laura A. Whiting	I	7	Winchester
	Elsie M. Wise	I	4	Chesterville
	Horatio Loucks	I	4	12 Winchester
	Esther Bates	II	2	22 Mountain
Durham	D. Hampton	II	4	Millbrook
	F. J. Grant	II	1	11 Darlington
	R. J. McKessock	II	1	20 "
	W. J. Trenouth	II	1	4 Clarke
	Georgia Walsh	III	1	9 Cavan

CONTINUATION CLASSES, 1906-7.

Post Office.	No. of Pupils.	Class of School.				Amount of Government Grant.			
		A	B	C	D	A	B	C	D
						$ c.	$ c.	$ c.	$ c.
Bruce Mines	25	1				380 00			
Thessalon	27		1				190 00		
Blind River	6			1				75 00	
Ophir	3				½				22 50
Massey	4				1				45 00
St. George	29	1				190 00			
Langford	4				1				22 50
Burford	3				1				22 50
Paisley	45	1				380 00			
Southampton	18	1				190 00			
Teeswater	38	1				190 00			
Ripley	16	1				190 00			
Lucknow	46		1				95 00		
Tiverton	8			1				37 50	
Whitechurch	8			1				37 50	
Westford	3				1				22 50
Kinlough	3				1				22 50
Ripley	4				1				22 50
Kinburn	19	1				190 00			
Bowesville	11	1				190 00			
Cumming's Bridge	12	1				190 00			
Munster	15	1				190 00			
Ashton	16	1				190 00			
Kars	14	½		½		95 00		18 75	
North Gower	26	1				190 00			
Carp	28	½	½			95 00	47 50		
Metcalfe	39	1				380 00			
Kenmore	20	1				190 00			
Ottawa, East	23	1				190 00			
Richmond	32	1				190 00			
Fitzroy Harbour	24	½	½			95 00	47 50		
Stittsville	28		1				95 00		
Malakoff	14		½	½			47 50	18 75	
Manotick	17		1				95 00		
Hintonburg	26		1				95 00		
Jock Vale	16		1				95 00		
Grand Valley	24	1				190 00			
Shelburne	48	1				380 00			
Horning's Mills	4				1				22 50
Mulmer	10			1				37 50	
Winchester	40	1				190 00			
Chesterville	29	1				190 00			
Morewood	36	1				190 00			
Mountain	6			1				37 50	
Millbrook	28	1				190 00			
Hampton	7			1				37 50	
Solina	7			1				37 50	
Clarke	5			1				37 50	
Fraserville	5			1				37 50	

APPENDIX D.—CONTINUATION

Inspectorate.	Name of Principal and Degree, also Assistant when he gives full time to Continuation class work.	Professional Certificate.	No. of Teachers.	Name of School.
Durham—*Continued.*	E. Lovina Rose	II	1	16 Darlington
	Henry J. Hoidge	II	2	12 Clarke
	Carrie B. Syer	I	1	2 Manvers
	Ella Beyol Smith	I	3	7 "
	Fred. R. Hall	III	1	1 Cartwright
	Eva J. Smith	III	1	8 "
	Harry Benson	III	1	1 S. Monaghan
	Sarah Taylor	III	1	5 "
	Tena Friely	II	2	15 Manvers
Elgin	W. H. Ward	I	4	5 Aldborough
	Alex. J. Leitch	I	4	6 "
	Geo. Stewart	II	4	Springfield
	D. N. McGregor	II	3	11 S. Dorchester
	B. Burwell	II	2	9 Southwold
	J. C. McLennan	III	1	11 "
	Edward Witty	II	2	12 "
	R. A. Catherwood	II	2	Port Stanley
	N. Mahon	III	1	8 Aldborough
	Jean Anderson	II	2	10 "
	Wray Smith	III	2	2 Bayham
	Alberta Clark	II	2	18 "
	J. McAskill	III	1	5 Dunwich
	M. J. Duncanson	I	1	9 "
	L. Davenport	III	1	1 Southwold
	C. Shepherd	III	1	2 "
	G. Murdock	III	1	4 "
	H. Burwell	III	1	10 "
	R. Henderson	II	2	7 Yarmouth
	M. Douglas	III	1	19 "
	Otto Cloes	II	1	22 "
	D. Ferguson	III	1	24 "
Essex, S	G. Summers	I	8	Amherstburg
	R. Hicks	I		
	L. M. McCutcheon, B.A	I	5	4 Tilbury, West
	L. Scott	I		
	L. Mott	I	4	9 Colchester South
	F. J. Voaden	I	7	Kingsville
	A. D. Campbell	II	1	2 Colchester, South
Frontenac	Miss Gene Wood	II	1	1 Storrington
	" N. C. Fraser	III	1	1 Oso
Glengarry	C. H. C. Moyer	1	4	Maxville
Grey, E	J. E. Marcellus	I	4	Thornbury
	W. S. Ferguson	III	2	3 Euphrasia
Grey, W	Lizzie R. Thomson	II	1	10 Sydenham
	C. F. Rosenow	III	3	Chatsworth
Grey, S	Thomas Allan	I	9	Durham
	Lola McLeod, B.A	I		
	Minnie Mallard			
	Jas. A. Magee	I	8	Hanover
	Jas. S. Rowe	II	4	Markdale
	Jno. Urquhart, B.A	I	4	Dundalk
	Jas. A. Coleridge	II	1	13 Egremont
	Herb. Campbell	III	1	3 Artemesia

CLASSES, 1906-7.—*Continued.*

Post Office.	No. of Pupils.	Class of School.				Amount of Government Grant.			
		A	B	C	D	A	B	C	D
						$ c.	$ c.	$ c.	$ c.
Enniskillen	3				1				22 50
Orono	3				1				22 50
Ballyduff	3				1				22 50
Janetville	4				1				22 50
Burketon	4				1				22 50
Blackstock	3				1				22 50
Bailieboro	4				1				22 50
S. Monaghan	3				1				22 50
Bethany	3				1				22 50
Rodney	25	1				190 00			
West Lorne	27	1				190 00			
Springfield	16	½	½			95 00	47 50		
Belmont	10		1				95 00		
Shedden	9			1				37 50	
Fingal	5			1				37 50	
"	5			1				37 50	
Port Stanley	5			1				37 50	
Rodney	4				1				22 50
Clachan	3				1				22 50
Port Burwell	3				1				22 50
Eden	4				1				22 50
Iona	3				1				22 50
Cowal	3				1				22 50
Boxall	3				1				22 50
Port Stanley	3				1				22 50
St. Thomas	3				1				22 50
Shedden	3				1				22 50
Sparta	3				1				22 50
New Sarum	3				1				22 50
Mapleton	3				1				22 50
St. Thomas	3				1				22 50
Amherstburg	25	1				380 00			
Comber	25	1				380 00			
Harrow	19	1				190 00			
Kingsville	12		1				95 00		
Colchester	5			1				37 50	
Latimer	5			1				37 50	
Oso Station	3				1				22 50
Maxville	39	1				190 00			
Thornbury	6			1				37 50	
Kimberly	8			1				37 50	
Woodford	6			1				37 50	
Chatsworth	4				1				22 50
Durham	74	1				570 00			
Hanover	42	1				190 00			
Markdale	15		1				95 00		
Dundalk	12		1				95 00		
Dromore	7			1				37 50	
Flesherton	6			1				37 50	

APPENDIX D.—CONTINUATION

Inspectorate.	Name of Principal and Degree, also Assistant when he gives full time to Continuation class work.	Professional Certificate.	No. of Teachers.	Name of School.
Grey, S. *Continued*....	W. J. Mill, B. A.....	II	3	5 Artemesia .....
	Annie G. Clark.....	III	1	8 Bentinck .....
	E. E. Kells.....	III	1	3 Egremont.....
	Amy I. Edge.....	III	1	1 Glenelg.....
Haldimand.....	Dawson F. Aiken	I	4	10 Walpole .....
	T. J. Hicks	II	2	3 " .....
	Maggie Kenney	II	2	1 " .....
	Jennie Hoover	III	1	2 " .....
Haliburton, N. E. Muskoka, East Parry Sound, etc.	A. C. Bernath.....	I	9	Huntsville.....
	Geo. R. Coombes.....	II	4	Powassan.....
	W. T. Arthurs	II	3	1 Anson. .....
	S. V. Carmichael.....	Temp.	3	South River .....
	A. Lunan.....	"	2	6 S. Himsworth.....
	W. I. Hansford	II	2	4 N. " .....
Halton.....	W. F. Inman.	I	7	Milton .....
	May Campbell	I		
	W. H. Stewart	I	7	Acton .....
	Jessie C. McKinnon	I		
	C. S. Wynne.....	I	8	Burlington .....
	Garnet Freeman.....	I		
Hastings, N.....	Robert Weir	II	4	Marmora .....
Hastings, S.....	V. K. Greer.....	I	6	Tweed .....
	John Bell.....	II	2	11 Sydney .....
	Adam Kiernan.....	II	1	29 Tyendinaga.....
Huron, E.	I. H. Cameron	I	6	Brussels.....
	Helen Ford.	I		
	John Hartley	I	4	Blyth .....
	A. H. MacDonald.....	II	2	11 Grey .....
	W. P. Dobson.....	III	2	Wroxeter.....
	F. T. Bryans.....	III	1	4 Grey .....
Huron, W	Louis C. Fleming.....	I	8	Exeter .....
	Stella Gregory.....	I		
	Agnes Johnston	I		
	Claud Binett.....	II	4	5 Stephen.....
	Harry R. Long.....	II	2	8 Ashfield .....
	Geo. W. Shore.....	II	1	6 Stanley .....
	Margaret G. Clark.....	III	1	3 Ashfield .....
	Nina Kilpatrick.....	II	1	6 " .....
	Flora McLeod.....	II	1	15 " .....
	Sara J. Bell	I	1	2 Goderich .....
	Bertha Hayter	III	1	9 " .....
	Isabel A. Thompson.....	III	1	14 Hay.....
	Ella Goldthorpe.....	III	1	3 Stanley .....
	Jean Musterd	II	1	10 " .....
	W. H. Johnston.....	II	1	14 " .....
	Ruby A. Robinson.....	III	1	17 W. Wawanosh .....
	Linda Milne.....	II	1	9 E. " .....
	Wm. Fingland	III	1	13 E. " .....
	A. A. Naylor	III	1	17 E. " .....
	Wm. McKay.....	II	3	Hensall .....
	B. E. Anderson	I	1	4 W. Wawanosh .....
	N. W. Trewartha.....	II	1	4 Goderich .....

CLASSES, 1906-7. *Continued.*

Post Office.	No. of Pupils.	Class of School.				Amount of Government Grant.			
		A	B	C	D	A	B	C	D
						$ c.	$ c.	$ c.	$ c.
Flesherton	7				1				22 50
Louise	3				1				22 50
Holstein	5				1				22 50
Bnnessan	3				1				22 50
Jarvis	21	1				190 00			
Selkirk	17		1				95 00		
Nanticoke	6			1				37 50	
Cheapside	4				1				22 50
Huntsville	25	1				380 00			
Powassan	17		1				190 00		
Minden	5			1				37 50	
South River	6			1				75 00	
Trout Creek	3				1				45 00
Callender	3				1				45 00
Milton	67	1				380 00			
Acton	32	1				380 00			
Burlington	42	1				380 00			
Marmora	15		1				95 00		
Tweed	23	1				190 00			
Frankford	12			1				37 50	
Lonsdale	6			1				37 50	
Brussels	64	1				380 00			
Blyth	24	1				190 00			
Ethel	12		½		½		47 50		11 25
Wroxeter	9			1				37 50	
Jamestown	3				1				22 50
Exeter	100	1				570 00			
Crediton	18		1				95 00		
Dungannon	9			1				37 50	
Varna	6			1				37 50	
Kintail	8				1				22 50
Dungannon	4				1				22 50
Lochalsh	4				1				22 50
Goderich	3				1				22 50
Clinton	5				1				22 50
Hensall	3				1				22 50
Bayfield	4				1				22 50
Brucefield	4				1				22 50
Kippen	5				1				22 50
Dungannon	5				1				22 50
Wingham	5				1				22 50
Belgrave	3				1				22 50
"	5				1				22 50
Hensall	5				1				22 50
St. Helen's	4				1				22 50
Holmesville	5				1				22 50

APPENDIX D.—CONTINUATION

Inspectorate.	Name of Principal and Degree, also Assistant when he gives full time to Continuation class work.	Professional Certificate.	No. of Teachers.	Name of School.
Kent, E	A. A. Merritt	I	8	Blenheim
	Bessie McCanmus	I		
	Henry H. Kelly, B.A.	II	4	Bothwell
	Emma Tivens	I		
	G. A. Miller	I	8	Dresden
	Jenny McConnell	I		
	C. A. Milburn	I	4	6 Orford
	J. G. Cameron	II	4	Thamesville
	Helen Jackson	I		
	Clifford Langford	I II	1	8 Camden
	Ella Zink	II	1	3 Harwich
	E. S. Stephenson	II	1	11 "
	Lizzie Noack	II	1	13½ "
	Laura Taylor	III	1	14 "
	J. C. Black	II	1	2 Orford
	Annie Blue	III	1	7 "
	Alice McCoig	III	1	3 Camden
	Cora Tiffin	III	1	4 Camden
	Mary Deacon	III	1	6 "
	Jessie Ferguson	II	2	4 Harwich
	James Samson	III	1	6 "
	Stella Rowe	II	1	7 "
	Clara Warner	III	1	8 "
	Fanny Smith	II	1	12 "
	Lila Gregory	III	1	16 "
	Duncan Johnston	II	1	2 Howard
	Lizzie Smith	II	1	3 "
	Blanche Marshall	III	1	7 "
	Morley Wilkinson	III	1	10 "
	Sara Gosnell	II	1	11 "
	Annie Hutchinson	III	1	14 "
Kent, W	E. W. Dickinson, B.A.	I	11	Wallaceburg
	Queenie Robertson	I		
	Nessie Alexander	I	4	Tilbury
	W. C. Dainty	II	4	4 U. Romney
	Robt. E. Park	III	1	1 Chatham
	Carrie Burns	II	2	9 "
	Gordon McDonald	III	1	5 Raleigh
	Cassie M. Hill	II	1	7 "
	Pearl Baker	III	1	9 "
	Elma Daniels	III	1	12 "
	Bertha Dell	I	1	5 E. Tilbury E.
	Kate B. McDonald	II	1	1 Romney
	Margaret Rowe	II	1	6 N. Chatham
	Carrie Rowe	II	1	6 S. Chatham
	Elizabeth Doyle	III	1	11 "
	Margaret McGrail	III	1	8 Dover
	Dora McKerral	II	1	11 "
	Jean McCaughrin	II	1	3 Raleigh
	Clarence Elliott	III	1	3 U. Raleigh
	Alice M. Hunt	I	2	5 "
	Dora Graham	III	1	2 E. Tilbury E.
	Percy Keys	III	1	3 E. " E.
	Musaetta Switzer	III	1	4 E. " E.
	Anna Coulthard	III	1	6 E. " E.
Lambton, E	H. E. Amoss, B.A.	I	7	Oil Springs
	Mary E. Lynch	I		
	F. Tanton	I	6	Alvinston
	Mary E. Lynch	I		

CLASSES, 1906-7.—*Continued.*

Post-Office.	No. of Pupils.	Class of School.				Amount of Government Grant.			
		A	B	C	D	A	B	C	D
						$ c.	$ c.	$ c.	$ c.
Blenheim	55	1				380 00			
Bothwell	65	1				380 00			
Dresden	45	1				380 00			
Highgate	30	1				190 00			
Thamesville	44	1				380 00			
Kent Bridge	8			1				37 50	
Fargo	7			1				37 50	
Guilds	8			1				37 50	
Rondeau	8			1				37 50	
Harwich	6			1				37 50	
Palmyra	8			1				37 50	
Muirkirk	6			1				37 50	
Dawn Mills	3				1				22 50
Wabash	3				1				22 50
Dresden	3				1				22 50
Blenheim	4				1				22 50
"	5				1				22 50
Mull	5				1				22 50
Harwich	3				1				22 50
New Scotland	5				1				22 50
Kent Bridge	4				1				22 50
Morpeth	4				1				22 50
"	3				1				22 50
Ridgetown	3				1				22 50
Selton	3				1				22 50
Ridgetown	5				1				22 50
Thamesville	4				1				22 50
Wallaceburg	65	1				380 00			
Tilbury	23	1				190 00			
Wheatley	12		1				95 00		
Chatham	7			1				37 50	
Tupperville	9			1				37 50	
Chatham	8			1				37 50	
Buxton	8			1				37 50	
Ouvry	6			1				37 50	
Chatham	6			1				37 50	
Tilbury	5			1				37 50	
Romney	5			1				37 50	
Eberts	3				1				22 50
"	4				1				22 50
Oungah	4				1				22 50
Baldoon	3				1				22 50
Dover Centre	4				1				22 50
Chatham	4				1				22 50
Cedar Springs	3				1				22 50
Merlin	4				1				22 50
Tilbury	3				1				22 50
Fletcher	4				1				22 50
Merlin	4				1				22 50
Stevenson	4				1				22 50
Oil Springs	27	1				380 00			
Alvinston	26	1				380 00			

APPENDIX D.—CONTINUATION

Inspectorate.	Name of Principal and Degree, also Assistant when he gives full time to Continuation class work.	Professional Certificate.	No. of Teachers.	Name of School.
Lambton, W.	Arthur Hone	III	3	11 Moore
	A. F. Batstone	III	2	18 "
	D. D. Thompson	II	1	6 Sombra
	Florence McGhee	III	2	7 "
	Robert Dodds	III	1	17 "
	N. J. Kearney	II	2	Thedford
	Emma Balls	III	1	5 Plympton
Lanark	Robt. Beatty	II	5	Lanark
	Mima A. Ellis, B.A.	II	4	4 Pakenham
	Euphemia McLaren	II	2	6 Lanark
	Ida Paul	II	2	11 Ramsay
Leeds & Grenville, No. 1.	B. Taggart	I	4	Westport
	R. Hanna	II	2	11 Bastard
	M. Toffey	III	2	6 "
Leeds & Grenville, No. 2.	Minnie Alford	II	2	7 Elizabethtown
	Vina Cauley	II	1	11 Kitley
	Geo. E. Scott	II	1	22 "
	Geo. W. Harris	III	1	7 Wolford
	Jennie Page	II	2	4 Front of Yonge
Leeds & Grenville, No. 3.	Stanley Wightman	I	5	Merrickville
	Fred. P. Smith	I	3	15 Edwardsburg
	Geo. Weedmark	II	6	Cardinal
	W. J. MacLachlan	II	2	1 and 5 Oxford
	John J. McKendry	III	3	17 Augusta
Lennox and Addington	E. J. Keenan	I	3	Bath
	Ellen Burleigh	III	1	3 Amherst
	D. J. Doyle	II	2	2 Kaladar
	P. G. Amey	III	1	2 Amherst Island
	F. Dryburgh	II	3	13 Ernestown
Lincoln	Frank Mittlefehldt	II	1	11 Gainsborough
Middlesex, E.	J. E. Day	II	2	2 Delaware
	George Garrett	III	2	4 N. Dorchester
	Mark Garrett	III	2	9 and 14 N. Dorchester
	Maggie Sterritt	III	1	2 Nissouri
Middlesex, W.	W. G. Robinson	II	2	U. 16 Caradoc & Ekfrid
	Myrtle D. Carruthers	1 Int.	1	2 Caradoc
	Edna Ingrouille	III	1	6 "
	Mary E. Thirlwell	II	1	14 "
	Effie McEachren	I	1	U. 8 Ekfrid
	Julia M. Boyd	II	1	6 East Williams
	W. J. Ferguson	II	2	Ailsa Craig
Manitoulin	D. Currie	I	5	Gore Bay
	J. Moriarity	I	3	2 Assiginack
	Jno. Young	II	4	Little Current
	Lillian Wooldridge	II	1	1 Hilton
	Jno. W. Clarke, B.A	II	1	1 Billings and Allan
	F. R. Meredith	Dist.	1	2 Howland
	Florence Hay	"	2	1 St. Joseph
	Amy Mepham	"	1	4 "

CLASSES, 1906-7—*Continued.*

Post Office.	No. of Pupils.	Class of School.				Amount of Government Grant.			
		A	B	C	D.	A	B	C	D
						$ c.	$ c.	$ c.	$ c.
Brigden	7			1				37 50	
Courtright	5			1				37 50	
Port Lambton	3				1				22 50
Sombra	4				1				*45 00
Terminus	3				1				22 50
Thedford	3				1				22 50
Wanstead	3				1				†22 50
Lanark	11	1				190 00			
Pakenham	30	1				190 00			
Middleville	4				1				22 50
Appleton	4				1				22 50
Westport	20	1				190 00			
Delta	7			1				37 50	
Portland	3				1				22 50
Lyn	3				1				22 50
Toledo	3				1				22 50
Jasper	3				1				22 50
Easton's Corners	3				1				22 50
Mallorytown	4				1				†22 50
Merrickville	30	1				190 00			
Spencerville	31	1				190 00			
Cardinal	10		1				95 00		
Burritt's Rapids	8			1				37 50	
North Augusta	3				1				22 50
Bath	36	1				190 00			
Stella	3				1				22 50
Flinton	4				1				22 50
Stella	6				1				22 50
Odessa	6				1				22 50
Wellandport	4				1				22 50
Delaware	6			1				37 50	
Dorchester Station	13			1				37 50	
Avon	5				1				22 50
Evelyn	5				1				22 50
Melbourne	22		1				95 00		
Christina	4				1				22 50
Roome	6				1				22 50
Burwell Road	4				1				22 50
Strathburn	4				1				22 50
Fernhill	4				1				22 50
Ailsa Craig	5				1				22 50
Gore Bay	40	1				‡680 00			
Manitowaning	19	½	½			190 00	95 00		
Little Current	10		1				‡490 00		
Marksville	5			1				75 00	
Kegawong	5			1				75 00	
Shegnindah	6			1				75 00	
Richard's Landing	3				1				45 00
Harmony	4				1				45 00

* Two years' grant. † Grant for 1905-6. ‡ Special grant, $300.

APPENDIX D.—CONTINUATION

Inspectorate.	Name of Principal and Degree, also Assistant when he gives full time to Continuation class work.	Professional Certificate.	No. of Teachers.	Name of School.
Nipissing	G. H. Steer	I	7	Sudbury
	D. T. Wright	I	7	New Liskeard
	W. H. Black	II	3	Cache Bay
	J. B. Stewart	II	4	1 Chapleau
	A. W. Smith	II	6	Sturgeon Falls
Norfolk	James M. Smith	III	4	Delhi
	John A. Evans	II	2	2 Middleton
	Ella M. Leeson	II	1	8 Houghton
Northumberland	Geo. B. Stewart	I	4	2 Percy
	Miss F. Hayes	III	1	9 "
Ontario, S.	Edwin Ball	II	2	15 Pickering
Ontario, N.	J. Givens	II	4	Beaverton
	F. Shain	II	2	5 Scott
	J. Walls	III	1	1 Mara
	M. Chambers	III	1	8 "
	J. M. Wilson	II	4	Cannington
	A. Foy	III	1	8 Scott
	M. Smith	III	1	2 Mara
	C. Sharrard	III	2	7 Uxbridge
	N. Ferguson	III	1	6 Brock
	Wm. Fallowdowne	II	3	13 "
	Jennie McDowell	III	1	9 Mara
Oxford	H. Wing	I	6	Norwich
	Daisy E. Taylor	I		
	T. E. Moffat	I	3	U. 21 and 3 Blenheim
	J. W. Dunlop	I	4	U. 13 and 3 E. Zorra
	P. H. Hendershott	II	2	U. 3 N. Norwich
	Allan Gibson	I	3	24 Blenheim
	Mary P. Morrison	I	3	5 Dereham
	R. A. Hutchison	III	2	6 "
	Herbert Cecil Branian	II	2	12 "
	G. R. Smith	I	3	U. 5 and 1 E. Nissouri
	W. M. Smith	III	1	5 E. Oxford
	L. H. Woodrow	III	2	10 E. Zorra
	Chas. Garthwaite	II	3	6 S. Norwich
	A. H. Kennedy	III	3	Embro
Parry Sound, West	J. L. Moore	I	14	Parry Sound
	Jno. B. Johnston, M.A.	II		
	Fanny Simpson	I	6	Burk's Falls
	Margaret Gardiner	II	2	Sundridge
	B. Cryderman	III	2	U. 1 Chapman
	Rosa E. Smith	Dist.	1	6 McKellar
	W. R. Tutt	III	2	1 Humphrey
Peel	Wm. M. Elliott, B.A.	H.S.P	4	Bolton
Perth	J. T. Curtis	II	4	Milverton
	Thos. W. Walker	II	1	U. 11 Blanshard
	Annie McKenzie	II	1	2 N. Easthope
	Duncan McKenzie	II	2	U. 10 S. Easthope
	D. Grant Anderson	II	2	10 Elma
	Maggie Huggins	II	2	U. 6, Logan
	Lawrence F. Brogden	III	1	8 Mornington
	Bevin Grainger	II	1	5 Elma

CLASSES, 1906-7.—*Continued.*

Post Office.	No. of Pupils.	Class of School.				Amount of Government Grant.			
		A	B	C	D	A	B	C	D
						$ c.	$ c.	$ c.	$ c.
Sudbury	18	1				380 00			
New Liskeard	10	1				*880 00			
Cache Bay	9			1				75 00	
Chapleau	8			1				75 00	
Sturgeon Falls	11			1				75 00	
Delhi	9			1				37 50	
Courtland	4				1				22 50
Guysboro	3				1				22 50
Warkworth	46	1				190 00			
"	4				1				22 50
Claremont	7				1				22 50
Beaverton	21		1				95 00		
Zephyr	7			1				37 50	
Gamebridge	8			1				37 50	
Udney	7			1				37 50	
Cannington	9			1				37 50	
Leaskdale	5				1				22 50
Gamebridge	4				1				22 50
Goodwood	5				1				22 50
Vallentyne	5				1				22 50
Sunderland	9			1				37 50	
Udney	3				1				22 50
Norwich	41	1				380 00			
Princeton	24	1				190 00			
Tavistock	28	1				190 00			
Burgessville	12		1				95 00		
Plattsville	36		1				95 00		
Mt. Elgin	12			1				37 50	
Verschoyle	6			1				37 50	
Brownsville	7			1				37 50	
Thamesford	12			1				37 50	
Oxford Centre	3				1				22 50
Innerkip	10				1				22 50
Otterville	4				1				22 50
Embro	7				1				22 50
Parry Sound	48	1				760 00			
Burk's Falls	18	1				†680 00			
Sundridge	10			1				75 00	
Magnetawan	6				1				45 00
McKellar	3				1				45 00
Rosseau	5				1				45 00
Bolton	35	1				190 00			
Milverton	12			1				37 50	
Kirkton	5				1				22 50
Shakespeare	3				1				22 50
Shakespeare	5				1				22 50
Atwood	4				1				22 50
Monkton	3				1				22 50
Millbank	4				1				22 50
Newry	4				1				22 50

* Special grant $500. †Special grant $300.

APPENDIX D.—CONTINUATION

Inspectorate.	Name of Principal and Degree, also Assistant when he gives full time to Continuation class work.	Professional Certificate.	No. of Teachers.	Name of School.
Peterborough	John A. O'Donohue	I	2	4 Ennismore
	Geo. Priddle	II	6	Havelock
	John G. Gordon	I	6	Lakefield
	Peter T. Pilkey	II	2	4 Otonabee
	Margaret A. Lees	III	1	5 "
	C. K. Fotheringham	III	1	2 Harvey
Prescott and Russell	G. A. McCullough	III	2	3 Cumberland
	H. J. Albright	III	1	8 Hawkesbury
	A. M. Christie	III	1	3 Longueuil
	K. T. Forrest	III	2	10 Plantagenet, N
Prince Edward	F. B. Clarke	I	3	Bloomfield
	J. M. Roote	II	1	11 Ameliasburg
	C. J. Tulley	III	2	Wellington
	H. C. Martin	III	2	17 Hillier
	Miss A. E. Colliver	III	1	1 Athol
	E. W. Ward	II	1	13 Hallowell
Renfrew	Duncan R. Harrison	II	5	Eganville
	Rachel Whalen	III	2	2 Brudenell
	Jas. W. S. Wilson	II	2	7 Westmeath
	Anna E. Brown	III	2	6 Ross
	Carrie Jack	Temp.	1	5 Stafford
	Jno. R. Pickering	III	2	1 McNab
Simcoe, East and West Muskoka	Miss K. C. McKee, B.A	I	3	7 Medonte
	Eva Coe	II	2	2 Stephensen
	Annie Nicholson	Dist.	1	9 "
	Geo. Spenceley	III	1	11 Oro
Simcoe, North	Wesley A. Tydell	I	5	5 Flos
	C. Carter	I	4	Creemore
	Miss A. M. Newell	III	1	20 Nottawasaga
	Neil Christie	III	2	3 "
	B. S. Scott	III	2	U. 5 " & Osprey
	Geo. Sutherland	II	1	14 "
	W. S. Giffen	III	1	4 Sunnidale
Simcoe, South-west	J. A. Speers, M.A	I	7	Alliston
	Winnifred Bell	I		
	Walter L. C. Richardson	I	6	Stayner
	Edwin Lindsay	I		
	Wm. T. Baker	I	4	Beeton
	Annie Willoughby	III		
	Harry S. White	I	4	Tottenham
	Hattie Tremeer	I		
	Harold B. Wood	I	4	5 Essa
	Florence Purser	I		
	Gertrude Steele	III	2	7 Essa
	Walter Steele	III	2	10 W. Gwillimbury
	Edith McDermitt	III	1	3 Adjala
	Richard W. Stewart	III	1	6 Essa
	John H. Burkholder	II	2	10 "
	Annie E. Wallace	II	1	4 Innisfil
	Robert Little	II	1	6 "
	Wm. B. Eby	III	1	7 "
	John A. Corbett	II	1	9 "
	Mat. Johnston	II	1	3 Sunnidale
	Wm. Burkholder	II	1	6 "
	Mary Gugins	III	1	7 Tecumseth

CLASSES, 1906-7.— *Continued.*

Post Office.	No. of Pupils.	Class of School.				Amount of Government Grant.			
		A	B	C	D	A	B	C	D
						$ c.	$ c.	$ c.	$ c.
Ennismore	19	1				190 00			
Havelock	10		1				95 00		
Lakefield	12		1				95 00		
Keene	13		1				95 00		
Lang	4				1				22 50
Bobcaygeon	4				½				11 25
Navan	13			1				37 50	
Barb	4				1				22 50
Cassburn	3				1				22 50
Pendleton	5				1				22 50
Bloomfield	12		1				95 00		
Mountain View	10		1					37 50	
Wellington	9				1				22 50
Consecon	6				1				22 50
Picton	3				1				22 50
West Lake	3				1				22 50
Eganville	30		1				95 00		
Brudenell	5			1				37 50	
Beachburg	9			1				37 50	
Foresters' Falls	9				1				22 50
Micksburg	8				1				22 50
White Lake	4				1				22 50
Coldwater	5			1				37 50	
Port Sydney	4				1				45 00
Utterson	4				1				45 00
Oro Station	4				1				22 50
Elmvale	38	1				190 00			
Creemore	32	1				190 00			
Batteau	6			1				37 50	
Duntroon	6			1				37 50	
Singhampton	10			1				37 50	
Avening	3				1				22 50
New Lowell	5				1				22 50
Alliston	78	1				380 00			
Stayner	45	1				380 00			
Beeton	41	1				380 00			
Tottenham	47	1				380 00			
Cookstown	38	1				380 00			
Ivy	18		1				95 00		
Newton Robinson	10		1				95 00		
Keenansville	5			1				37 50	
Thornton	6			1				37 50	
Angus	6			1				37 50	
Lefroy	5			1				37 50	
Thornton	5			1				37 50	
Churchill	6			1				37 50	
Thornton	5			1				37 50	
Brentwood	8			1				37 50	
New Lowell	7			1				37 50	
Penville	5			1				37 50	

APPENDIX D.—CONTINUATION

Inspectorate.	Name of Principal and Degree, also Assistant when he gives full time to Continuation class work.	Professional Certificate.	No. of Teachers.	Name of School.
Simcoe, South-west.—*Con.*	Wilmot Davidson	III	1	11 Tecumseth
	Thomas Irwin	II	1	4 Tossorontio
	Geo. Wilson	II	1	5 "
	Frances T. Ronan	Temp.	1	4 Adjala
	Annie Reynolds	III	1	5 "
	Annie Crowe	II	1	8 "
	Annie O'Leary	II	1	9 "
	Ellen M. Handy	III	1	2 Essa
	Kathleen Chapman	III	1	4 "
	Eva Murday	III	1	11 "
	Wilmot Hussey	III	1	5 W. Gwillimbury
	Agnes King	III	1	5 Innisfil
	Wilfred Wolfe	III	1	8 "
	Wm. A. Stewart	III	2	10 "
	John H. Coleman	III	1	14 "
	Robt. H. Gauley	III	1	5 Sunnidale
	Anne Campbell	III	1	9 "
	Margaret Jackson	III	1	10 "
	Adam White	III	1	13 Tecumseth
	Alf. G. Green	II	1	19 "
	Marshall Murday	III	1	2 Tossorontio
	Andrew R. Kidd	II	1	8 "
	Florence Ovens	III	1	9 Essa
Stormont	James Froats, B.A	I	3	Finch
	Mabel Drewry	I Int.	3	14 Roxborough
	Annie D. Griswold	II	2	1 Osnabruck
Thunder Bay and Rainy River	A. C. Crosby, M.A	I	4	Fort Frances
	F. C. Poole	I	5	1 Keewatin
	G. A. Evans	III	3	1 Schreiber
	T. Knechtel	II	4	Rainy River
	T. Scott	II	2	5 Lash
Victoria, East	John M. Simpson	II	5	Bobcaygeon
	Neil Q. McEachern	II	2	3 Somerville
Victoria, West, and S.E. Muskoka	H. R. Scovell, B.A	I	13	Bracebridge
	Mary Hodgins	I		
	T. E. Spiers, B.A	I	6	Fenelon Falls
	G. B. Rennie	II	2	12 Mariposa
Waterloo, No. 1	J. D. Ramsay	II	9	Hespeler
	Frederick Ward	II	2	7 Woolwich
Waterloo, No. 2	G. W. Dale	II	4	Ayr
	J. M. Roszel	I	5	New Hamburg
	Jas. Kerr	II	4	16 Wellesley
Welland	C. E. Hansel	II	5	Bridgeburg
	C. Jackson	II	5	Port Colborne
	E. W. Farr	II	2	9 Pelham
	F. T. Harvey	II	3	11 Bertie
	Gertrude Grant	II	3	Fort Erie
	Geo. A. Henry	II	1	4 Wainfleet
Wellington, North	Chas. Cameron	I	8	Palmerston
	V. W. Rutherford	I		
	Geo. Scott	III	2	2 Peel
	Tena McIntyre	II	3	Clifford
	Wm. E. Harrison	III	1	16 Peel

CLASSES, 1906-7.— *Continued.*

Post Office.	No. of Pupils.	Class of School.				Amount of Government Grant.			
		A	B	C	D	A	B	C	D
						$ c.	$ c.	$ c.	$ c.
Bond Head	6			1				37 50	
Lisle	7			1				37 50	
Lisle	8			1				37 50	
Loretto	4				1				22 50
Arlington	3				1				22 50
Achill	3				1				22 50
Ennis	3				1				22 50
Elm Grove	3				1				22 50
Cookstown	3				1				22 50
Baxter	3				1				22 50
Bond Head	4				1				22 50
Belle Ewart	4				1				22 50
Nantyr	4				1				22 50
Stroud	4				1				22 50
Painswick	3				1				22 50
New Lowell	4				1				22 50
Stayner	3				1				22 50
Jack's Lake	3				1				22 50
Thompsonville	3				1				22 50
Beeton	3				1				22 50
Alliston	4				1				22 50
Everett	3				1				22 50
Utopia	4				1				22 50
Finch	29	1				190 00			
Avonmore	16	1				190 00			
Dickinson's Landing	11			1				37 50	
Fort Frances	13	1				380 00			
Keewatin	10		1				190 00		
Schreiber	6			1				75 00	
Rainy River	3				1				45 00
Emo	3				1				45 00
Bobcaygeon	20		1				95 00		
Kinmount	4				1				22 50
Bracebridge	50	1				760 00			
Fenelon Falls	26	1				190 00			
Oakwood	10			1				37 50	
Hespeler	8			1				37 50	
Winterbourne	6				1				22 50
Ayr	14			1				37 50	
New Hamburg	8			1				37 50	
Wellesley	6				1				22 50
Bridgeburg	23		1				95 00		
Port Colborne	22		1				95 00		
Fenwick	4				1				22 50
Ridgeway	6				1				22 50
Fort Erie	7				1				22 50
Marshville	4				1				*45 00
Palmerston	51	1				380 00			
Glen Allen	7			1				37 50	
Clifford	4				1				22 50
Stirton	3				1				22 50

* Two years' grant.

APPENDIX D.—CONTINUATION

Inspectorate.	Name of Principal and Degree, also Assistant when he gives full time to Continuation class work.	Professional Certificate.	No. of Teachers.	Name of School.
Wellington, South	G. J. Katzenmeyer	I	3	Erin
	John C. McNabb.	I	7	Macdonald Consolidated.
	John W. Yake	I	5	Drayton
	Sarah E. Jackson, B.A	II		
	Albert E. Smith	II	2	9 Eramosa
	Thos. Armstrong	II	1	4 Nichol
	Jean E. Cardno	III	1	4½ Eramosa
	Margt. McDonald	II	1	8 Erin
	Edgar V. McKinnon	III	1	9 "
	Elizabeth McWilliams	II	1	5 Guelph
	Ira Hammond	II	1	8 Puslinch
	W. S. Elvidge	II	1	7 W. Garafraxa
	G. McEachern	II	1	4 Puslinch
	W. Ewart	II	1	11 "
Wentworth	Lilly Raycroft	I	2	3 Barton
	A. E. Wilcox	II	4	3 Saltfleet
	Geo. W. Clark	II	2	11 Ancaster
	Mrs. M. E. Goff	II	2	9 W. Flamboro
	James E. Stewart	II	2	7 "
Windsor and Walkerville	Hugh A. Beaton	II	9	Walkerville
York, North	Fred. Schooley	I	3	13 E. Gwillimbury
	A. A. Cameron	I	3	14 King
	Grover S. Lloyd	III	2	19 "
York, South	Miss A. G. McAllister	I	2	Woodbridge
	James Hand	II	4	Stouffville
R. C. Bi-Lingual Schools, West	Rev. Mother M. Gertrude		4	Tilbury
R. C. Bi-Lingual Schools, East.	Bridget Seguin	III	4	5 Clarence
	Sister M. Cleophas	III	3	15 Gloucester
R. C. Separate Schools, East.	Sr. St. Andrew		4	Westport
	Sr. Ernestine		4	Eganville
	Anatasia Nolan	II	1	12 Hagarty
	Carrie Jordan	II	2	Chesterville
R. C. Separate Schools, Central.	E. Jones	I	5	Mattawa
	Sr. M. Gertrude		6	Sudbury
	Thos. J. Ryan	II	1	10 Adjala
R. C. Separate Schools, West.	Sr. M. Ethelburt		7	Amherstburg
	Marie C. Benn	II	2	2 Ashfield
	Sr. M. Genevieve		3	Wallaceburg
	Sr. M. Jerome		4	14 Carrick
	Sr. Gertrude Lachance	I	1	1 Hay
	John J. Boland	II	2	6 Stephen
	Alice O'Leary	II	1	5 Sombra
Totals, 1906–7	468 Continuat'n Class Teachers	*		438 Schools
" 1905–6	461 " "			429 "
Increases	7 Continuation Class Teachers			9 Schools

* 134 I Class and 179 II Class in 1906-7.
131 I Class and 216 II Class in 1905-6.

CLASSES, 1906-7.—*Concluded.*

Post Office.	No. of Pupils.	Class of School.				Amount of Government Grant.			
		A	B	C	D	A	B	C	D
						$ c.	$ c.	$ c.	$ c.
Erin	17	1	....	....	....	190 00	.....	.....	.....
Guelph	15	1	....	....	....	190 00	.....	.....	.....
Drayton	72	1	....	....	....	380 00	.....	.....	.....
Rockwood	8	....	....	1	....	.....	.....	37 50	.....
Ennotville	5	....	....	1	....	.....	.....	37 50	.....
Oustic	7	....	....	....	1	.....	.....	.....	22 50
Acton	3	....	....	....	1	.....	.....	.....	22 50
Mimosa	4	....	....	....	1	.....	.....	.....	22 50
Mosborough	4	....	....	....	1	.....	.....	.....	22 50
Morriston	5	....	....	....	1	.....	.....	.....	22 50
Belwood	7	....	....	....	1	.....	.....	.....	22 50
Aberfoyle	3	....	....	....	1	.....	.....	.....	22 50
Hespeler	6	....	....	....	1	.....	.....	.....	22 50
Hamilton	14	....	1	....	....	.....	95 00	.....	.....
Stony Creek	10	....	1	....	....	.....	95 00	.....	.....
Carluke	10	....	....	1	....	.....	.....	37 50	.....
Strabane	6	....	....	1	....	.....	.....	37 50	.....
Millgrove	7	....	....	....	1	.....	.....	.....	22 50
Walkerville	9	....	....	1	....	.....	.....	37 50	.....
Mt. Albert	28	1	....	....	....	190 00	.....	.....	.....
Schomberg	22	1	....	....	....	190 00	.....	.....	.....
Nobleton	5	....	....	1	....	.....	.....	37 50	.....
Woodbridge	35	1	....	....	....	190 00	.....	.....	.....
Stouffville	8	....	....	1	....	.....	.....	37 50	.....
Tilbury	12	....	1	....	....	.....	95 00	.....	.....
Clarence Creek	6	....	....	1	....	.....	.....	37 50	.....
Orleans	7	....	....	1	....	.....	.....	37 50	.....
Westport	38	1	....	....	....	190 00	.....	.....	.....
Eganville	24	1	....	....	....	190 00	.....	.....	.....
Killaloe Station	6	....	....	....	1	.....	.....	.....	22 50
Chesterville	6	....	....	....	1	.....	.....	.....	22 50
Mattawa	16	....	1	....	....	.....	190 00	.....	.....
Sudbury	8	....	....	....	1	.....	.....	.....	45 00
Colgan	7	....	....	....	1	.....	.....	.....	22 50
Amherstburg	26	1	....	....	....	190 00	.....	.....	.....
Kingsbridge	10	....	1	....	....	.....	95 00	.....	.....
Wallaceburg	5	....	....	1	....	.....	.....	37 50	.....
Mildmay	3	....	....	....	1	.....	.....	.....	22 50
Drysdale	3	....	....	....	1	.....	.....	.....	22 50
Mt. Carmel	3	....	....	....	1	.....	.....	.....	22 50
Port Lambton	3	....	....	....	1	.....	.....	.....	22 50
.....	5,315	90	41	106	201	25,610 00	4,622 50	4,350 00	5,260 00
.....	5,224	88	41	100	200	19,528 75	3,225 00	3,985 00	4,837 50
.....	91	2	....	6	1	6,081 25	1,397 50	365 00	422 50

NOTE.—Total Government Grant 1906-7..... $39,842 50
" " 1905-6..... 31,576 25

Increase for the year ..... $ 8,266 25

APPENDIX E.—FREE TEXT BOOKS IN RURAL SCHOOLS, 1907.

Inspectorate.	Name of school (section number and township) and amount expended for text books.	Total amount expended.	Total amount of Legislative aid.
		$ c.	$ c.
Middlesex, West	6 E. Williams, $12.68	12 68	6 34
Perth	6 Downie, $2.24; 8 Downie, $1.96	4 20	2 10
Totals, 1907	3 Schools	16 88	8 44
Totals, 1906	7 schools	97 37	48 67
Decreases		80 49	40 23

APPENDIX F.—ADMISSION OF CANDIDATES TO COLLEGIATE INSTITUTES AND HIGH SCHOOLS.

ENTRANCE EXAMINATION, JUNE 1907.

	Examined	Passed
Collegiate Institute.		
Aylmer	94	66
Barrie	121	73
Berlin	161	140
Brantford	206	157
Brockville	100	79
Chatham	165	147
Clinton	51	47
Cobourg	77	59
Collingwood	111	53
Galt	166	144
Goderich	78	56
Guelph	133	116
Hamilton	701	589
Ingersoll	99	65
Kingston	189	156
Lindsay	96	74
London	428	366
Morrisburg	71	33
Napanee	115	73
Niagara Falls	110	89
Orillia	179	121
Ottawa	485	356
Owen Sound	195	145
Perth	102	76
Peterborough	184	116
Renfrew	110	64
Ridgetown	70	54
St. Catharines	79	61
St. Mary's	118	74
St. Thomas	166	110
Sarnia	155	119
Seaforth	75	62
Stratford	171	143
Strathroy	111	84
Toronto (Harbord)	516	379
" (Jameson)	272	211
" (Jarvis)	413	282
Toronto Junction	162	96
Vankleek Hill	82	53
Whitby	78	54
Windsor	149	124
Woodstock	149	85
Totals	7,296	5,451
High Schools.		
Alexandria	92	58
Almonte	58	48
Arnprior	62	40
Arthur	76	65
Athens	95	68
Aurora	65	59
Beamsville	49	48
Belleville	184	130
Bowmanville	58	41
Bradford	57	40
Brampton	104	69
Brighton	34	26
Caledonia	49	33
Campbellford	77	49
Carleton Place	69	51
Cayuga	36	20
Chesley	58	48
Colborne	37	32
Cornwall	127	84
Deseronto	56	48
Dundas	83	64
Dunnville	61	45
Dutton	58	45
East Toronto	79	60
Elora	26	20
Essex	61	43
Fergus	83	58
Forest	65	53
Fort William	44	33
Gananoque	93	61
Georgetown	51	35
Glencoe	67	55
Gravenhurst	68	35
Grimsby	47	44
Hagersville	39	29
Harriston	57	44
Hawkesbury	35	21
Iroquois	79	40
Kemptville	60	30
Kenora	34	34
Kincardine	62	32
Leamington	55	51
Listowel	92	66
Lucan	87	65
Madoc	66	32
Markham	103	78
Meaford	55	40
Midland	60	44
Mitchell	89	66
Mount Forest	75	52
Newburgh	118	77
Newcastle	27	21
Newmarket	60	47
Niagara	25	17
Niagara Falls South	35	23
North Bay	44	22
Norwood	73	46
Oakville	59	42
Omemee	73	62
Orangeville	71	21
Oshawa	86	74
Pa is	65	45
Parkhill	91	53

APPENDIX F.—*Continued.*

	Examined	Passed
High Schools.—*Continued.*		
Pembroke	138	77
Penetanguishene	49	30
Petrolea	81	57
Picton	125	74
Plantagenet	40	24
Port Arthur	50	30
Port Dover	29	24
Port Elgin	50	39
Port Hope	83	69
Port Perry	49	36
Port Rowan	46	28
Prescott	89	38
Richmond Hill	78	59
Rockland	31	25
Sault Ste. Marie	106	69
Simcoe	84	50
Smith's Falls	52	43
Smithville	28	19
Stirling	50	26
Streetsville	31	24
Sydenham	80	48
Thorold	37	31
Tillsonburg	86	59
Toronto Technical	73	53
Trenton	52	46
Uxbridge	83	54
Vienna	40	28
Walkerton	67	40
Wardsville	21	15
Waterdown	40	24
Waterford	66	41
Watford	80	68
Welland	65	31
Weston	136	103
Wiarton	55	45
Williamstown	35	19
Wingham	68	58
Totals	6,577	4,586
Other Places.		
Aberfoyle	22	22
Acton	37	34
Alliston	69	51
Alvinston	70	43
Ameliasburg	29	21
Amherstburg	55	34
Ancaster	31	23
Angus	15	13
Apsley	2	2
Arkona	27	20
Ashton	10	7
Aultsville	38	19
Avonmore	53	27
Ayr	18	17
Bailieboro	27	19
Bancroft	29	15
Bath	39	28

	Examined	Passed
Other Places.—*Continued.*		
Bayfield	9	9
Beaverton	38	21
Beeton	28	25
Belle River	19	6
Belmont	38	33
Bethany	19	13
Binbrook	24	15
Blackstock	41	16
Blenheim	71	45
Blind River	22	9
Blyth	39	33
Bobcaygeon	31	19
Bolton	40	22
Bothwell	38	27
Bowesville	6	4
Bracebridge	56	46
Bridgeburg	32	28
Brigden	38	21
Bruce Mines	33	20
Brussels	64	55
Burford	45	21
Burgessville	19	11
Burk's Falls	35	22
Burlington	43	36
Burritt's Rapids	13	5
Cannington	41	28
Cardinal	25	13
Carp	43	24
Castleton	11	10
Cataraqui	56	37
Chapleau	15	13
Charleston	36	19
Chatsworth	34	25
Chesterville	47	18
Claremont	14	10
Clifford	11	6
Cobden	53	40
Comber	28	17
Cookstown	62	45
Copper Cliff	7	6
Courtright	39	24
Crediton	49	28
Creemore	29	19
Crosshill	22	18
Cumberland	31	14
Deer Park	23	12
Delhi	64	39
Delta	56	33
Denbigh	4	2
Dickenson's Landing	24	15
Dorchester Station	47	31
Drayton	38	28
Dresden	48	41
Drumbo	23	14
Dryden	14	9
Dundalk	34	15
Dungannon	36	24
Durham	62	51
Easton's Corners	9	8

APPENDIX F.—*Continued.*

	Examined	Passed		Examined	Passed
Other Places.—*Continued.*			Other Places.—*Continued.*		
Eganville	70	51	Macdonald Consolidated	30	23
Eglinton	30	15	Magnetawan	18	11
Elmira	27	13	Manitowaning	16	13
Elmvale	57	30	Ma otick	29	19
Embro	51	30	Markdale	32	18
Emo	14	10	Marmora	27	16
Ennismore	21	16	Marshville	28	18
Erin	54	29	Marsville	15	4
Exeter	59	39	Massey	15	9
Fenelon Falls	52	41	Mattawa	17	10
Feversham	34	15	Maxv lle	64	33
Finch	63	27	Mer vale	19	15
Fingal	65	36	Merlin	42	34
Flesherton	35	25	Merrickville	38	11
Florence	37	24	Merritton	68	46
Fordwich	26	16	Metcalfe	30	15
Fort Frances	12	7	Mildmay	16	10
Fournier	9	8	Millbrook	41	21
Galetta	28	17	Milton	78	68
Glen Allan	14	7	Milverton	36	34
Gore Bay	48	37	Minden	28	22
Grand Valley	46	16	Moorefield	14	10
Haileybury	12	8	Morewood	29	13
Hall's Bridge	9	7	M unt Albert	30	22
Hanover	21	15	Mount Elgin	18	8
Harrow	22	19	Mount Hope	28	17
Hastings	33	17	Mount Pleasant	24	12
Havelock	15	10	Mountain	19	9
Hensall	27	23	Neustadt	13	4
Hepworth	15	9	Newbor '	20	10
Highgate	26	18	New Hamburg	31	27
Hillsdale	33	23	New Liskeard	16	8
Hintonburgh	47	37	North Augusta	11	6
Horning's Mills	10	5	North Gower	23	16
Huntsville	42	23	N rth Lancaster	22	11
Innerkip	18	9	Norwich	36	26
Janetville	11	9	Oakwood	16	10
Janeville	13	6	Oil Springs	38	19
Jarvis	36	22	Orono	28	20
Jasper	12	9	Osgoode Station	7	4
Kars	10	10	Ottawa East	14	9
Keene	15	12	Ottawa South	21	17
Keewatin	9	8	Otterville	17	12
Keswick	10	5	Paisley	71	41
Killarney	6	6	Pakenham	30	27
Kilmaurs	10	5	Palmerston	27	12
Kimberley	18	9	Parry Sound	63	40
Kingsville	25	22	Pelham S.S., No. 2	29	26
Kintail	27	25	Pelee Island	12	4
Kirkfield	36	21	Plattsville	33	21
Lakefield	66	45	Port Colborne	28	19
Lanark	63	42	Port Stanley	14	10
Lancaster	26	10	Powasson	55	27
Laurel	17	9	Princeton	16	12
Lion's Head	22	10	Queensville	19	15
Little Current	17	14	Ramsayville	8	5
Little Britain	17	11	Randwick	11	2
London East	172	127	Richard's Landing	10	9
Lucknow	41	34	Richmond	19	10

APPENDIX F.——*Continued.*

	Examined	Passed
Other Places.—*Continued.*		
Ridgeway	28	10
Ripley	29	21
Rockton	48	26
Rockwood	33	30
Rodney	37	20
Rosemont	22	9
Roseneath	6	6
Russell	26	20
St. George	25	12
St. Helen's	21	15
Sandwich	70	25
Schomberg	33	22
Schreiber	13	11
Selkirk	11	7
Sharbot Lake	51	25
Shelburne	57	24
Solina	15	10
Southampton	17	17
South Indian	23	22
South Mountain	21	8
Sparta	30	10
Spencerville	43	24
Springfield	15	8
Stayner	58	41
Stittsville	18	6
Stoney Creek	48	37
Strabane	13	12
Stroud	44	33
Sturgeon Falls	38	26
Sudbury	40	32
Sutton	25	20
*Tamworth	..	..
Tara	36	20
Tavistock	21	14
Teeswater	40	28
Thamesford	26	18
Thamesville	73	48
Thedford	21	14
Thessalon	11	7
Thornbury	60	34
Thorndale	37	31
Tilbury	48	37
Tiverton	28	15
Toronto (De La Salle Inst.)	141	131
Tottenham	49	30
Tweed	57	40
Uppergrove	36	20
Varna	13	8
Vernon	18	8
Victoria Harbour	22	11
Victoria Mine	10	5
Wallaceburg	60	51
Warkworth	27	15
Waubaushene	23	13
Webbwood	11	6
Wellandport	28	19
Wellington	25	19
West Lorne	25	20
Westport (S parate School)	29	18
Wheatley	25	20
Whitevale	9	9
Wilkesport	25	12
Winchester	49	22
Wolfe Island	35	21
Woodbridge	28	18
Woodville	28	20
Wooler	22	13
Wroxeter	16	13
Wychwood	15	9
Wyoming	29	25
Zephyr	18	12
Zurich	21	14
Totals,	8,271	5,393
SUMMARY.		
Collegiate Institutes	7,296	5,451
High Schools	6,577	4,586
Other Places	8,271	5,393
Grand totals, 1907	22,144	15,430
Comparisons with *June, 1906.*		
Increases	434	1,611

*No report received.

APPENDIX G.—PROCEEDINGS FOR THE YEAR 1907.

I. REGULATIONS AND CIRCULARS.

Examinations.

(Instructions No. 5.)

Instructions to Presiding Officers, 1907.

☞Presiding Officers are requested to peruse carefully the following instructions and see that they are fully carried out:—

(1) Each Inspector or such other person as may be appointed by the Minister, shall receive from the Department or the Inspector, the examination papers, and shall thereupon be responsible for the safe keeping of the bag and its contents until the examination is concluded.

(2) On the receipt of the bag containing the question papers the Presiding Officer will see that *the seal is intact*. The bag can be opened by cutting the cord, and when opened the names and numbers of the envelopes containing the question papers should be verified with the time-table. Should any question envelopes be missing, telegraph the Department at once.

(3) The Presiding Officer will satisfy himself that all necessary arrangements are made by the School Board in due time for the examination. If the trustees have not placed a clock in each room used for examination purposes the Presiding Officer shall have power to hire the use of one for each room during the time required for the examination, and charge the same as part of the expenses of the examination.

(4) The Presiding Officer shall, if there is sufficient accommodation and if sufficient papers have been received, admit candidates who through some oversight did not send their applications to the Inspector. The names of such candidates are to be entered in the Supplementary List (Form No. 181), specially provided, with such information as is required of the other candidates. This list and the required part of the fee with one dollar additional as provided, shall be sent by the Presiding Officer to the Education Department. The remainder of the fee shall be sent to the Board that bears the expense of the examination.

(5) The Presiding Officer shall exercise necessary vigilance at all times while the candidates are engaged, and he *shall not give his attention to any work other* than that which pertains to his duties as Presiding Officer. He shall take all necessary care to render it impossible for the instructions to candidates to be violated without his knowledge. This instruction (5) is to be observed, however small may be the number of candidates.

(6) It is imperative that the regulations be enforced by the Presiding Officer and strictly observed by the candidates. In particular the examination papers shall be distributed, and the answer papers collected, *punctually* at the time indicated on the time-table. The Presiding Officer has no authority to deviate from the official time-table.

(7) In the examination room, candidates, whether writing on the same subject or on different subjects, shall be seated at least five feet apart. All diagrams or maps having reference to the subject of examination shall be removed from the room, and books, papers, etc., removed from the desks; all arrangements shall be completed, and the necessary stationery distributed at least *fifteen minutes* before the time appointed for the commencement of the first subject of the examination, and at least *five minutes* before each other subject is begun.

(8) The necessary stationery includes pens, blotting-paper, black ink of a uniform color, and the authorized examination answer books. Each candidate will receive *one* examination-book and one answer-envelope at the beginning of each examination period and other books as required during said period. No paper other than the examination-book must be distributed to the candidates, and no paper, examination-book or other book must be brought into the room by any candidate. (The Presiding Officer's attention is called to the instructions as to the use of the examination-books on the first page thereof.)

(9) No person except the Presiding Officers and any necessary attendants shall be present with the candidates in any room at the examination; and at least one Presiding Officer shall be present during the whole time of the examination in each room occupied by the candidates. A Presiding Officer shall not have in his charge at one time more than *twenty-five* candidates.

(10) The Presiding Officer shall, as indicated on the time-table, read to the candidates their duties, drawing attention to any feature of them that may require special care during the examination, and emphasizing the directions to the candidates as to the manner in which the slips are to be attached to the envelopes. *Great care should be taken in distributing the proper number and kind of envelopes* and examination-books and in accounting for such envelopes and examination-books as have been distributed. (Also see (3) (*a*), page 108.)

(11) *Punctually* at the time appointed for the commencement of each examination, the Presiding Officer shall, in the examination room and in the presence of the candidates and other assistant Presiding Officers (if any), break the seal of the envelope containing the question papers, and give them to the assistant officers and to the candidates. The papers of only the subject or subjects required shall be opened at one time. Until the examination in the subject is over no examination papers, other than those which the candidates receive, shall be taken out of the room.

(12) *Punctually* at the expiration of the time allowed, the Presiding Officer shall direct the candidates to stop writing, and cause them to hand in their answer papers *immediately*, duly fastened in the envelopes.

(13) The Presiding Officer shall keep upon his desk the tally-list (check-list of candidates and subjects) and as each paper in any subject is handed in (and he should carefully note the superscription of the envelope—the subject and the candidate's name) he shall check the same by entering the figure "1" opposite the name of the candidate. The Presiding Officer will enter the names of the candidates on the tally-list *in the same order as found on the official list of candidates* (Form 44). The names of extra candidates are to be added after the names of those on the official list. After the papers are handed to the Presiding Officer he shall not allow the answer envelopes to be opened, and he shall be responsible for their safe keeping until transmitted to the Education Department. The answer-envelopes as well as the question-envelopes should be kept in a safe, or in a room with the windows fastened and doors securely locked by a cylinder lock.

(14) For special instructions regarding the examinations in Stenography, Biology, etc., see the circular which is forwarded to each Presiding Officer prior to the examination.

(15) In case of the illness of any candidate during the examination, the Presiding Officer should report full particulars to the Department *at the close of the examination* and his report should be accompanied by a

medical certificate. Certificates received after this date will not be considered by the Board of Examiners when determining the results of the examination.

Instructions to Candidates.

(To be read to candidates as indicated on time-table.)

(1) Each candidate shall satisfy the Presiding Officer as to his personal identity before the commencement of the first day's examination, and any person detected in attempting to personate a candidate shall be reported to the Department. The Presiding Officer is authorized to refuse the application of any candidate who presents himself at any centre other than that nearest his usual place of residence, unless the candidate's explanation of his course in so presenting himself is in every way satisfactory to the Presiding Officer.

(2) Candidates shall be in their allotted places before the hour appointed for the commencement of the examination. If a candidate be not present till after the appointed time, he shall not be allowed any additional time. No candidate shall be permitted, on any pretence whatever, to enter the room after the expiration of an hour from the commencement of the examination. The Presiding Officer is authorized to refuse admission even within the hour if the candidate's explanation is in any sense unsatisfactory, or if he has reason to suspect collusion between the newly-admitted candidate and other candidates.

(3) A candidate shall not leave the room within *one hour* after the distribution of the examination papers in any subject; and if he then leave he shall not be permitted to return during the examination on such subject.

(4) Every candidate shall conduct himself in strict accordance with the instructions. Should he violate the instructions to be found in sections 5 and 6 below or on the first page of the examination-book; should he take into the room or have in his possession, in his desk, or on his person, any book, notes, paper, or anything from which he may derive assistance; should he talk, whisper, or make signs to another candidate; *should he leave his answers so exposed that any candidate may copy from him;* should he give or receive aid or extraneous assistance of any kind whatsoever, his examination will be cancelled and he will be debarred from presenting himself at any Departmental examinations for two years. Should the Presiding Officer obtain clear evidence of the violation of these instructions at the time of its occurrence he shall cause the candidate concerned at once to leave the room; he shall strike his name from the list of candidates; and he shall not permit him to return to the room during the remaining part of the examination. If, however, the evidence be not complete at the time, or be obtained after the close of the examination, the Presiding Officer shall report the case to the Department.

(5) Every candidate shall write the name of the subject of examination very distinctly at the top of each page of his examination-book. If he write his name or any distinguishing mark on his examination-book, or if he tear any paper from this book, or if he insert in this book any matter not pertinent to the examination, or if he use any paper or book or ink other than that provided, his examination may be cancelled.

(6) The candidate shall write his answers and full solutions on the ruled sides of the leaves of his examination-book or books (if more than one be needed); he may use the unruled sides in preparing the answers in rough.

He shall fold his examination-book (or books) once across, place it in the envelope provided by the Presiding Officer, seal the envelope, write on the outside of the envelope the subject of examination only, and on the slip provided, his name in full (surname preceding), and then securely fasten the slip to the envelope, as instructed by the Presiding Officer. Candidates should see that their answers are placed in the proper envelopes. Scholarship candidates should designate their answers, and also the envelopes containing their answers, "Pass" or "Honour" according to the papers taken.

Every candidate competing for a scholarship, who also desires Senior Teachers' standing, must write upon all the subjects of the Senior Teachers' course which are not included in his scholarship examination. He must place the answers in his scholarship subjects in the scholarship (red) envelopes, and the answers in other Senior Teachers' subjects in regular Senior Teachers' envelopes.

(7) Candidates for the Junior or Senior Teachers' examination who take extra matriculation papers for the *purpose of matriculation standing*, should place the answers to such extra papers in matriculation envelopes and the Presiding Officer shall enter their names (if this has not already been done) on the matriculation tally-list. Such extra matriculation papers are to be returned to the Department along with the answers of the regular matriculation candidates. *Parts A and B of the Matriculation History and Experimental Science papers are to be put in separate envelopes.*

Candidates are also reminded that the Presiding Officer is not allowed to make *any explanation* or other statement regarding the probable meaning of any question or to *give any advice* as to what question should be answered by the candidates or how any question should be answered.

(8) Should any error appear to have been made in any question, *no attention* shall be drawn to it during the time of examination by either the Presiding Officer or any of the candidates. Candidates may, however, at the end of the examination period submit the matter to the Presiding Officer, who, if he considers it necessary, will report on the matter to the Department at the close of the examination.

Making Reports and Returning Answers to the Department.

(1) The Presiding Officer shall report to the Education Department at the close of the examination in the "remarks" column of the Diagram Blank (Form 292) any particulars in which the instructions, etc., were not observed and he shall mention any facts regarding the examination that he deems expedient to have brought before the Board of Examiners. The Presiding Officer and his assistants shall sign a declaration that in all other respects the instructions and regulations were fully complied with.

(2) The Presiding Officer as part of his report to the Department shall send a diagram of *each room* on the forms provided (Form 292), showing the position occupied by each candidate and Assistant Presiding Officer during each examination. *Candidates shall not be permitted to change positions.*

(3)—(*a*) *The Presiding Officer shall not arrange the answer papers according to subjects, but shall arrange them so that all the answers of each candidate for examination shall be sent together* [*except as specified in* (*b*)] *and in the order in which their names appear on the list of candidates for the Examination.* (Form 44.) *To facilitate this, elastic bands have been supplied, one for each candidates' set of answers.*

(*b*) Where a candidate takes papers belonging to different examinations, such papers are to be divided according to the examinations taken and each parcel sent with those of the other candidates for these examinations.

(4) The prompt return of the answers to the Education Department at the close of the respective examinations is essential, and may be greatly facilitated if the answers are sorted at the close of each day's examination. All diagrams and reports (*except the tally-list*) should be forwarded to the Department *by post* on the respective days that the answers are forwarded. The tally-list of each examination must be returned in its respective bag with the candidates' answer-envelopes.

(5) The answers of the candidates taking (*a*) The District Certificate examination and (*b*) the Commercial Specialists' examination, together with the corresponding tally-lists, shall be returned, *in separate parcels*, securely tied, at the close of those examinations, in one of the bags provided.

(6) The answers of the candidates for (*a*) Part II. Junior Teachers' and (*b*) Junior Matriculation Examinations, together with the corresponding tally-lists, shall be returned in *separate parcels, securely tied*, at the close of the Junior Matriculation Examination, in one of the bags provided.

The answers of the candidates for (*a*) Honour Matriculation and (*b*) Scholarship Examinations, together with the corresponding tally-lists, shall be returned in *separate parcels, securely tied*, at the close of those Examinations, in one of the bags provided.

(7) *The answers of all Scholarship candidates shall be enclosed in the envelopes specially provided (red).*

8.—(*a*) Each bag shall be so folded and tied that the words, "The property of the Education Department," will be outwards. The shipping tag should be securely attached to the strap on each bag.

(*b*) All the express charges *must be prepaid*, and no commercial value should be placed upon the bags and contents.

(*c*) All surplus examination papers may be given at the close of the examination to the principal of the school.

Expenses of the Examination.

The Treasurer of the High School Board or of the Public School Board of the school where the examination is held shall pay, on the certificate of the Public School Inspector, all the expenses of the examination, which shall include the following:—

(1) For preparing the list of candidates, the Inspector shall be entitled to the remuneration of $2.00, providing that the number of the candidates writing does not exceed twenty. For each additional twenty candidates or fraction of that number the Inspector shall be entitled to an additional dollar. It is to be understood that the number of applications received, and not the examinations on which candidates write, will determine the amount paid for this service.

(2) For conducting the examination each Presiding Officer and each Assistant Presiding Officer shall be entitled to $4.00 a day and actual travelling expenses, which shall include railway fare or the ordinary cost of conveyance.

(3) For meeting the incidental expenses of the examination, the cost of stationery, etc., and the payment for any additional services required during the examination.

General Information and Instructions.

(1) The Examination fees are:—District Certificate Examination, $5. Part II. Junior Teachers', $5. Junior Matriculation Examination, $5. Senior Teachers' Examination, Part I. and II., each, $3; taken together, $5. If this examination be divided as provided in Circular 50A (1906), $3 for each part. Commercial Specialist Examination, $5. For candidates taking not more than *four* papers (*not subjects*), for the purpose of completing Matriculation standing, the fee is $2. For more than four papers, $5. Honour or Scholarship Matriculation, $5. If the fees for a candidate amount to more than $5, only $5 will be required.

Attention is directed to the scale of fees to be paid by candidates. When the fee is $5, $3 or $2, the amount to be sent to the Department is $3, $2 or $1 respectively. The remainder of the fees received is to be forwarded to the High School Board or other body that bears the expenses of the examination.

(2) Applications will not be received by the Inspector after the 24th day of May, and candidates are reminded that they should in no case forward their applications to the Education Department. If the candidate should, through an oversight, neglect to have his application duly sent to the Inspector, he may present himself at the examination, when the Presiding Officer is at liberty to admit him, provided there is the necessary accommodation, and that a sufficient number of question-papers has been forwarded. An additional fee of $1 will be exacted by the Presiding Officer from a candidate who presents himself in this way.

(3) *Principals having candidates for the various Departmental examinations should inform them in regard to the following matters*:—

(*a*) To place their answer papers in the correct envelopes. Candidates for matriculation scholarships should place *all* their answer papers in scholarship (*red*) envelopes, and on the outside of the envelope, in the place designated, should not fail to indicate whether the answers enclosed are answers to *pass* (junior) or *honour* (senior) papers. Pass junior matriculants will place their answers in junior matriculation (*white*) envelopes. Honour matriculants (who are not scholarship candidates) will place their answers to the honour papers in the envelopes (*manilla*) designated "Senior Teachers and Honour Matriculation," and their answers to pass papers in the (*white*) matriculation envelopes. Candidates for Junior Teachers' standing who are also taking extra papers for the purpose of completing matriculation should put such extra answer papers in matriculation (*white*) envelopes and their other answers in Junior Teachers' envelopes.

(*b*) Scholarship candidates who desire Senior Teachers' standing should not make application therefor until after the scholarship results are made known.

(*c*) Candidates for the Senior Teachers' certificate, if they desire to have their honour matriculation standing certified, should make application to the Department after the results of the former examination are issued.

(*d*) The Department does not furnish statements of the matriculation standing obtained by scholarship candidates, either for *pass* or *honours*.

(*e*) As Teachers' Junior and Senior certificates are accepted *pro tanto* for matriculation purposes, matriculation certificates covering the subjects included in the former certificates are not issued.

(*f*) Cases of illness during the examination should be reported by the

Presiding Officer to the Department at the close of the examination and should be accompanied by a medical certificate stating precisely the nature of the illness, and the time and duration of its occurrence.

(*g*) Pupils making appeals must state where they wrote and the examination attempted. Principals sending in appeals for students should make *each appeal on a separate sheet of paper*. The fee for appeal is $2.

(*h*) No appeal is allowed in the case of scholarship candidates.

(*j*) Any candidate who is prevented from attending the examination for which he applied, may have his fee refunded by applying to the High School Board or other body that bears the expense of the examination for that part which it receives and to the Department for that part which it receives.

(*k*) Candidates who do not make application until the day of examination are charged $1 extra.

February, 1907.

Public Libraries.

Secretary of ..... Public Library:

Dear Sir,—Your attention is called to the following *re* classification of books in invoices, purchased for a Public Library:

(1) Under the new Regulations the Legislative grant to Public Libraries, for the year 1907, will be paid upon the following classification:

(2) In the invoices showing books purchased for a Public Library, upon which the Legislative grant is paid, all novels must be classified as fiction. No exception to this rule will be permitted.

(3) Blank invoices will be furnished (free) by this Department on application.

(4) The blank invoices for the year 1907 contain a new sub-section, viz., "Juvenile." Under this heading all books of a juvenile character should be included.

(5) Under the new regulation the percentage of fiction upon which a grant shall be paid has been increased from 20 to 45 per cent. of the total sum paid for the purchase of books for use in a Public Library.

(6) No grant will be paid upon any excess of 45 per cent. of fiction.

(7) Library Boards are requested to see that invoices for books are made out upon the blanks furnished by this department and that they are complete in every particular.

(8) The classification above indicated applies only to invoices for books purchased.

(9) A Public Library Board has full power to use any classification for placing the books upon the library shelves, but the Dewey Decimal and Cutter systems, or a combination of said systems, is recommended.

March, 1907.

Travelling Libraries.

To the Secretary of.....Public Library:

Dear Sir,—During the year 1907, the Education Department will lend travelling libraries to small Public Libraries, without any restrictions exclusive of the conditions set forth in the Regulations and Applications furnished by the Department.

The object aimed at is to assist small Public Libraries, which find themselves hampered for want of funds, with which to purchase new books, and thus maintain public interest in the local library.

It should be distinctly understood that it is not the intention of the Department to supply all of the books required, but to aid and encourage the library movement.

A careful examination of the Annual Report of Public Libraries for the year 1907 will be made by the Inspector of Public Libraries at the end of the official year, December 31st, 1907, and upon the results shown in that report will be based the decision as to the advisability of lending a travelling library or libraries for the year 1908.

The Library which has not by local effort purchased any new books during 1907 cannot reasonably expect to secure a travelling library for the following year.

Under this rule Public Libraries which neglect to forward to this Department the annual report by the 15th day of February, will be rigidly excluded from participating in the benefits afforded by a travelling library.

It is the aim of this Department to increase the number of travelling libraries during the years 1908-1909 so that it should be possible to supply small libraries with from two to four travelling libraries during each year.

Practically the travelling libraries sent out will, for a considerable period, contain no duplications. Special attention is called to the children's books supplied by travelling libraries. The local librarians are requested to circulate those books extensively, and also to keep a careful record in the Register furnished with each Library of all books circulated.

April, 1907.

Instructions to Inspectors.

(Instructions No. 13.)

Distribution of the Legislative Grant.—Rural Public and Separate Schools in the Districts of Ontario.—Provisions of the Amended Department of Education Act.

The following are the provisions of Section 4 of the Education Department Act, as amended at the recent session of the Legislature, on which has been based the new scheme of distributing the Legislative Grant to the Rural Public and Separate Schools in the Districts:

It shall be the duty of the Minister of Education, and he shall have power:

(3) Subject to the Regulations of the Department of Education, to apportion all sums of money voted by the Legislative Assembly as a general grant for the Rural Public and Separate Schools in the organized counties and districts amongst said rural schools in the organized counties and in the districts respectively on the basis of the salaries paid to the teachers, the value of the equipment, the character of the accommodations, the grade of the teachers' professional certificates, and the amount of the assessments.

(5) Subject to the Regulations of the Department of Education, the grants for the Rural Public and Separate Schools in the districts shall be payable in two instalments direct to the respective boards of trustees as the Lieutenant-Governor in Council may direct; the first instalment on or before the first day of August and the second on or before the first day of December.

(6) Under the provisions of such regulations as may be made by the Department of Education, to apportion to Public and Separate School Boards in poor rural districts, and to the residents of lumber, mining, and

other settlements all sums of money voted by the Legislative Assembly for teachers' salaries to Public and Separate School Boards in poor rural districts, and for such other school purposes as the Minister of Education may consider expedient.

Scheme of Distribution.

The information herein contained is now communicated to the District Inspectors in order that they may have sufficient time to procure from School Boards and Township Clerks the data necessary for the official returns on which the distribution will be made by the Education Department, and the forms for which will be sent to each Inspector as soon as they are printed. All returns from School Boards shall be certified by the Secretary or Secretary-Treasurer; those from the Township Clerks shall be certified by these officials; and said returns shall be retained by the Inspector for at least one year as his authority for his official report. The Legislative Grants must be paid by the Education Department on or before August 1st. It will accordingly be necessary for the Inspector to act as expeditiously as possible in procuring the information he may need, so as to be able to fill in the official forms not later than June 22nd. As provided in section 4 (5) quoted above, the instalments will be payable direct to the School Boards concerned; the first, on or before the first day of August; and the second, on or before the first day of December, provided the Inspector certifies that the school has been in effective operation for the second half year.

The assessments specified below, on which the grants concerned will be based, are as follows:

(1) In the case of *organized townships*, the average section assessment of each township for 1907 shall be computed on the assessment of 1906, that for 1908 on the assessments of 1906 and 1907, and thereafter on the assessments for the three years next preceding the year of distribution. In computing the said average section assessment, the lands of the supporters of each Separate School in the township shall be reckoned as a section.

(2) In the case of *unorganized townships*, the assessment of each section for 1907 shall be computed on the assessment of 1906, that for 1908 on the average of the assessments of 1906 and 1907, and thereafter on the average of the assessments for the three years next preceding the year of distribution.

(3) If, in any year, the assessment of 1906 is reduced in any case, such reduction shall not be recognized by the Education Department, unless satisfactory reasons are submitted, through the Inspector, for said reduction.

(4) Where there are two schools in a section, half the section shall be reckoned as belonging to each school.

(5) Where a union section is made up of sections of different townships, the union section shall be reckoned as belonging to that township in which the school house is situated.

Under the new scheme the total yearly apportionment to each school shall be the sum of the grants to which it is entitled under the following regulations, but

(1) Only half of each grant shall be paid where the school is open less than the full year but at least one term;

(2) Only half of the grant on the assistant teacher's salary shall be paid when he teaches less than the full year but at least one term;

(3) Continuation Classes Grades A and B shall not share in this apportionment.

I. *Grants Payable on the Basis of the Teachers' Salaries.*

(1) Where the assessment, as defined above, is under $20,000, 40 per cent. of the excess of each salary over $100, to a maximum salary of $600.

(2) Where the assessment, as defined above, is $20,000 or over, 40 per cent. of the excess of the salary of each Principal over $150 and of each assistant over $100, in each case to a maximum salary of $600.

For 1907 the Grant on teachers' salaries will be computed on the rate per annum current when the Inspector makes his report. Thereafter it will be computed on the amount paid for the school year (beginning after June of the year preceding the year of apportionment).

II. *Grants Payable on the Basis of the Teachers' Certificates.*

(1) $20 on each Professional District Certificate.
(2) $25 on each Professional Third Class Certificate.
(3) $30 on each Professional Second Class Certificate,
(4) $35 on each Professional First Class Certificate.

The grant is payable on the grade of the certificate of the teacher in the school when the Inspector reports.

The grant shall be one-half the amount if the teacher teaches at least one term but less than a year.

No grant will be made on the grade of a teacher's certificate in any year without the attestation of the Inspector that the teacher concerned is teaching satisfactorily to said Inspector.

III. *Special Grants Payable to Schools in Poor Districts.*

The following special grants will be paid out of the Legislative Grant for assisted Public and Separate Schools in new districts:

(*a*) *Fixed Minimum Grants.*

(1) Where the assessment, as defined above, is under $20,000, a special grant of $40.

(2) Where the assessment, as defined above, is at least $20,000, but less than $30,000, a special grant of $30.

(3) Where the assessment, as defined above, is at least $30,000, but less than $40,000, a special grant of $25.

(4) Where the assessment, as defined above, is at least $40,000, but less than $50,000, a special grant of $20.

(*b*) *Grants payable for the Improvement of Equipment and Accommodations.*

(1) Where the assessment, as defined above, is under $20,000, a special grant of $30.

(2) Where the assessment, as defined above, is at least $20,000 and under $30,000, a special grant of $15.

The special grants for the improvement of equipment and accommodations shall be expended by the trustees under the advice of the Inspector, and before August 1st of the year next following the receipt of the grant.

At the apportionment of the Legislative Grant in 1908, where the assessment, as defined above, is over $30,000, a percentage will be allowed on the value of the equipment, and a grant on the character of the accommo-

dations. These grants will be apportioned as far as practicable on the same conditions as are now provided for the apportionment of the grant on the basis of the equipment and the accommodations in the case of Rural Public and Separate Schools in the organized counties. (See Circular No. 33, 1907.)

(c) Further Grants to Assisted Schools.

As provided in section 4 (6) of the Education Department Act, quoted above, further grants will be made to assist special cases of hardship in school sections and in settlements where there is as yet no school organization, for teachers' salaries and for such other purposes as the Minister of Education may deem expedient. Such grants will be made on the report of the Inspector concerned, who shall set forth in full detail on or before the first of November of each year, in a form to be obtained from the Minister, the conditions which, in his judgment, necessitate such grants.

Special Grant for Rural School Libraries.

A special grant of $5,000 was made in aid of Rural School Libraries of the Province at the recent session of the Legislature. The share of the Districts in this grant will be distributed this year as a percentage on the value of all books purchased between July 1st, 1906, and July 1st, 1907, provided no school receive more than $5.00 and no purchase is less than $10.00. The books shall also have been approved by the Inspector as especially suitable for the pupils' use.

All applications for this grant must be made by the Trustees through the Inspector, on or before the 10th day of July. The Trustees shall supply the Inspector with all the information he may require, in regard to the purchases of the books, including vouchers from the booksellers.

The Inspector will make application to the Education Department on a form to be provided, which must be forwarded to the Education Department not later than the first day of August.

At its next session, the Minister will recommend to the Legislature a grant for the same purpose, and any purchases made of library books for the pupils' use after the 1st of July of this year will be taken into account in next year's distribution of the Legislative Grant.

April, 1907.

Instructions to Inspectors.

(Instructions No. 12.)

Distribution of the Legislative Grant. Rural Public and Separate Schools in the Organized Counties of Ontario.—Provisions of the Amended Education Department Act.

The following are the provisions of section 4 of the Education Department Act, as amended at the recent session of the Legislature, on which has been based the new scheme of distributing the General Legislative Grant to the Rural Public and Separate Schools in the organized counties:

It shall be the duty of the Minister of Education and he shall have power:

(3) Subject to the Regulations of the Department of Education, to apportion all sums of money voted by the Legislative Assembly as a general grant for the Rural Public and Separate Schools in the organized counties and districts amongst said rural schools in the organized counties and in the

districts respectively on the basis of the salaries paid to the teachers, the value of the equipment, the character of the accommodations, the grade of the teachers' professional certificates, and the amount of the assessments.

(4) The grant for the Rural Public and Separate Schools in the organized counties shall be payable on or before the first day of August, as the Lieutenant-Governor in Council may direct, to the Treasurer of each county, and through him (except when the County Treasurer acts as sub-treasurer also) to the various Township Treasurers of the county, for payment to the respective Boards of Rural Public and Separate School Trustees upon the warrants of the Public or Separate School Inspectors concerned.

(6) Under the provisions of such regulations as may be made by the Department of Education, to apportion to Public and Separate School Boards in poor rural districts, and to the residents of lumber, mining, and other settlements all sums of money voted by the Legislative Assembly for teachers' salaries to Public and Separate School Boards in poor rural districts, and for such other school purposes as the Minister of Education may consider expedient.

Scheme of Distribution.

The information herein contained is now communicated to the Public and the Separate School Inspectors in order that they may have sufficient time to procure from School Boards and County and Township Clerks the data necessary to fill in the official returns on which the distribution will be made by the Education Department and the forms for which will be sent to each Inspector as soon as they are printed. All such data as above shall be certified by the official concerned. The Inspector shall see that they are properly made out and shall retain them for at least one year as the authority for his official report. The grants must be paid by the Education Department on or before the first day of August, and it will, accordingly, be necessary for the Inspector to act as expeditiously as possible in procuring the information he may need, so that he may make his report to the Minister not later than June 22nd.

The average section assessment of the township, hereinafter specified, shall be calculated in accordance with the last made equalized assessments of the municipalities in the manner provided by the Municipal and Assessment Acts. In computing said average, Union Sections made up of portions of different townships shall be regarded as belonging to the township in which the school building is situated, according to the equalization made by the assessors as provided in section 54 of the Public Schools Act of 1901; and the lands of the supporters of each Separate School shall be regarded as a section.

Under the new scheme, the total yearly apportionment to each school shall be the sum of the grants to which it is entitled under the following regulations; but

(1) Only half of each grant shall be paid where the school is open less than the full year, but at least one term;

(2) Only half of the grant on the assistant teacher's salary shall be paid when he teaches less than he full year but at least one term;

(3) Continuation Classes, Grades A and B, shall not share in this apportionment.

I. *Fixed Grants.*

Where the average section assessment of the township, as defined above, is less than $30,000.00, each school shall receive a fixed grant of $30.00;

where it is at least $30,000.00 and less than $40,000.00, the fixed grant shall be $25.00; and where it is at least $40,000.00 and less than $50,000.00, it shall be $20.00.

II. *Grants on Salaries.*

For the present year the grant on salaries shall be distributed on the basis of the rates current when the Inspector makes his report. Thereafter it will be made on the basis of the amounts paid in salaries each school year (beginning in August and ending in June).

Each school shall receive 40 per cent. of the excess amount of the salaries up to a maximum of $600.00 salary in the case of each teacher, the computation beginning as follows:

(1) At $150.00 for a principal teacher and at $100.00 for each assistant teacher where the average section assessment, as defined above, of the township where the school is situated is less than $30,000.00;

(2) At $200.00 for a principal and at $150.00 for each assistant, where said assessment is at least $30,000.00 and less than $40,000.00;

(3) At $250.00 for a principal and at $150.00 for each assistant where said assessment is at least $40,000.00 and less than $60,000.00;

(4) At $300.00 for a principal and at $200.00 for each assistant in the case of all other assessments.

III. *Grants on the Qualifications of the Teachers.*

An additional grant of $20.00 shall be apportioned in each case where the teacher holds a Professional Second Class or First Class Certificate, the competency of each such teacher being attested by the County or the Provincial Inspector of the school in which said teacher is teaching when the grant is applied for. The grant shall be one-half the amount if the teacher teaches at least one term but less than a year.

IV. *Grants on Equipment and Accommodations.*

Of the general Legislative Grant, $60,000 shall be apportioned on the value of the equipment and the character of the accommodations. To the several amounts thereof apportioned to each county, each county shall add at least the equivalent, as provided for by section 19 [70 (1)] of the Public Schools Amendment Act of 1907, in accordance with the following regulations:

(1) When the amount of the Legislative and County Grants is insufficient to provide for each school the sums required under the following regulations, the Inspector shall make a *pro rata* deduction from the total grant to each school; and where there is a balance over after making the provision for each school as required by the said regulations, he shall make a *pro rata* addition to the total grant to each school.

(2) When a Union School Section is composed of portions of townships in different counties, the grant to its school from each county shall, as far as practicable, be that fraction of the Legislative Grant payable to said school which the assessed value of the portion of the section within the county is of the whole assessed value of the section, according to the equalization made by the assessors, as provided in section 54 of the Public Schools Act of 1901.

(3) For the present year, the grant to each Inspectorate shall be sub-apportioned by the Inspector in accordance with the instructions of Circular No. 33, 1906, as to the grading of the accommodations; and the items of the equipment therein (the minimum list), provided in each school, shall be those on the value of which he will reckon the percentage. Thereafter these grants shall be distributed in accordance with the instructions of Circular No. 33, as revised in 1907. The special equipment for a Continuation Class shall not be included.

(4) Out of the combined Legislative and County grants, each school shall receive 10 per cent. of the approved value of the equipment up to a maximum grant of $20.00 for each principal and of $2.50 additional for each assistant.

(5) Out of the combined Legislative and County grants, each school shall receive a grant on the character of its accommodations, the maximum being $30.00 for a one-teacher school, $45.00 for a two-teachers school, and $60.00 for a school with more than two teachers, in accordance with the following scheme:

Grade.	One teacher.				Two teachers.				Three teachers and over.			
	I.	II.	III.	IV.	I.	II.	III.	IV.	I.	II.	III.	IV.
	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
Closets	4 00	3 00	2 00	1 00	6 00	4 50	3 00	1 50	8 00	6 00	4 00	2 00
Water supply	2 00	1 50	1 00	50	2 00	1 50	1 00	50	3 00	2 25	1 50	75
School grounds	4 00	3 00	2 00	1 00	5 00	3 75	2 50	1 25	6 00	4 50	3 00	1 50
School buildings	2 00	1 50	1 00	50	3 00	2 25	1 50	75	4 00	3 00	2 00	1 00
Class rooms	2 00	1 50	1 00	50	3 00	2 25	1 50	75	4 00	3 00	2 00	1 00
Halls	.....	.....	.....	....	2 00	1 50	1 00	50	3 00	2 25	1 50	75
Cap rooms	2 00	1 50	1 00	50	3 00	2 25	1 50	75	4 00	3 00	2 00	1 00
Private rooms	1 00	75	50	25	1 50	1 10	75	40	2 00	1 50	1 00	50
Desks	2 00	1 50	1 00	50	3 00	2 25	1 50	75	4 00	3 00	2 00	1 00
Blackboards	1 00	75	50	25	1 50	1 10	75	40	2 00	1 50	1 00	50
Lighting	2 00	1 50	1 00	50	3 00	2 25	1 50	75	4 00	3 00	2 00	1 00
Heating	4 00	3 00	2 00	1 00	6 00	4 50	3 00	1 50	8 00	6 00	4 00	2 00
Ventilation	4 00	3 00	2 00	1 00	6 00	4 50	3 00	1 50	8 00	6 00	4 00	2 00
	30 00	22 50	15 00	7 50	45 00	33 70	22 50	11 30	60 00	45 00	30 00	15 00

Mode of Distribution.

The fixed grants under 1., the 40 per cent. grants on excess of teachers' salaries under II., and the grants on teachers' certificates under III., will be distributed by the Minister, through the County or Township Treasurers, as the case may be, on or before the first day of August; and the several amounts thereof apportioned to each Section Treasurer will be payable by the County or the Township Treasurer, as the case may be, on the order of the Inspector concerned.

In the Departmental distribution of the $60,000 grant on the equipment and the accommodations, this sum will be divided first by the total number of the teachers in the Rural Public and Separate Schools in the organized counties at the time the Inspector makes his report (excluding the teachers of Continuation Classes Grades A and B), the principal teacher being reckoned as a unit and each assistant as a half. In case a teacher shall have been employed less than the full time during the year preceding July he

shall be reckoned, if a principal, as a half, and, if an assistant, as a quarter; provided, however, he shall have taught not less than half a year. The quotient thus obtained, multiplied by the number of teachers in each inspectorate (reckoned as above) will give the total Legislative Grant to be distributed in each Inspectorate on the basis of equipment and accommodations. This part of the Legislative grant will be paid by the Education Department at the same time and to the same officials as in the case of the other Legislative Grants.

As soon as the Public or the Separate School Inspector concerned has secured the necessary data, and before December the first at the latest, he shall sub-apportion the Legislative Grant on the equipment and the accommodations with the County equivalent, amongst the schools in his Inspectorate, in accordance with the scheme under IV. above, which defines the application of said grants for equipment and accommodations. As in the case of the other grants, these grants will be payable to each Section Treasurer by the County Treasurer, or the Township Treasurer, as the case may be, on the order of the Inspector concerned. If said grants are payable by the Township Treasurer, the Inspector, when he has made his sub-apportionment, shall notify the County Treasurer of the amount due the Township Treasurer on this account.

☞In order that each County Council may be duly notified at its June meeting of the amount it must raise, under section 19 [70 (1)] of the Public Schools Amendment Act of 1907, as the equivalent of the Legislative Grant to the county on equipment and accommodations, it is indispensable that each Inspector should notify the Minister on or before May 22nd of each year, as to the number respectively of Principal and Assistant Teachers of the Rural Schools in his Inspectorate, specifying separately the number of each who shall have taught by June 30th less than one year, and at least six months, and, when he has rural schools in different counties, making a separate return of such principal and assistant teachers in each county.☜

Grants to Assisted Schools.

As heretofore, the grant to Assisted Schools (formerly called "Poor Schools"), provided for in section 4 (6) of the Amended Education Department Act of 1907, quoted above, will be apportioned on the report of the Inspector, who shall supply, in a form to be obtained from the Minister, the details necessary to enable him to form a proper judgment as to the merits of each application.

Special Grant for Rural School Libraries.

A special grant of $5,000.00, made in aid of School Libraries at the recent session of the Legislature, will be distributed amongst the Rural Public and Separate Schools of the Province. In the organized counties this year their share of this grant will be apportioned as an additional percentage on thev alue of all library books purchased between July 1st, 1906, and July 1st, 1907, provided no school receives more than $5.00 and no purchase is less than $10.00. The books shall also have been approved by the Inspector as especially suitable for the pupils' use.

All applications for this grant must be made by the Trustees through the Inspector, on or before the 10th day of July. The trustees shall supply the Inspector with all the information he may require, in regard to the purchase of the books, including vouchers from the booksellers.

The Inspector will make application to the Education Department on a form to be provided, which must be forwarded to the Education Department not later than the first day of August.

Next year the Minister will recommend to the Legislature a grant for the same purpose, and any purchases made of books for the pupils' use after the first of July of this year will be taken into account in next year's apportionment of the Legislative Grant.

May, 1907.

Apportionment of the General Legislative Public and Separate School Grant to Urban Municipalities for 1907.

(Circular No. 22.)

The apportionment of the Grant to the urban municipalities named in this list is based, under the amended Department of Education Act of 1907, upon the Returns of Population for the year 1906 received from the municipal clerks, and the division thereof between the Public and Separate Schools has been calculated on the average attendance of that year as reported by the Public and Separate School Boards of Trustees respectively.

While under the authority of the Act the Separate Schools will receive their portion of the grant specified herein direct from the Department, that of the Public Schools will be paid, according to this Schedule, through the respective City, Town and Village Treasurers.

Apportionment of the Public and Separate School Grant to Cities, Towns and Villages for 1907.

CITIES	Public Schools.	Separate Schools.	Total
	$ c.	$ c.	$ c.
Belleville	803 00	183 00	986 00
Brantford	1,841 00	260 00	2,101 00
Chatham	858 00	209 00	1,067 00
Fort William	836 00	267 00	1,103 00
Guelph	1,109 00	321 00	1,430 00
Hamilton	5,625 00	1,134 00	6,759 00
Kingston	1,593 00	436 00	2,029 00
London	4,280 00	637 00	4,917 00
Niagara Falls	796 00	106 00	902 00
Ottawa	3,439 00	3,994 00	7,433 00
Peterborough	1,144 00	501 00	1,645 00
Port Arthur	836 00	287 00	1,123 00
St. Catharines	1,037 00	255 00	1,292 00
St. Thomas	1,303 00	163 00	1,466 00
Stratford	1,188 00	266 00	1,454 00
Toronto	23,827 00	4,085 00	27,912 00
Windsor	1,100 00	528 00	1,628 00
Woodstock	975 00	61 00	1,036 00
Total	$52,590 00	$13,693 00	$66,283 00

APPORTIONMENT OF THE PUBLIC AND SEPARATE SCHOOL GRANT TO CITIES, TOWNS AND VILLAGES FOR 1907.—*Continued.*

TOWNS.	Public Schools.	Separate Schools.	Total.
	$ c.	$ c.	$ c.
Alexandria	29 00	215 00	244 00
Alliston	159 00	.....	159 00
Almonte	241 00	84 00	325 00
Amherstburg	117 00	135 00	252 00
Arnprior	283 00	186 00	469 00
Aurora	184 00	.....	184 00
Aylmer	231 00	.....	231 00
Barrie	651 00	95 00	746 00
Berlin	1,027 00	309 00	1,336 00
Blenheim	156 00	.....	156 00
Blind River	190 00	.....	190 00
Bonfield	15 00	44 00	59 00
Bothwell	88 00	.....	88 00
Bowmanville	309 00	.....	309 00
Bracebridge	318 00	.....	318 00
Brampton	341 00	.....	341 00
Brockville	796 00	249 00	1,045 00
Bruce Mines	94 00	.....	94 00
Cache Bay	77 00	.....	77 00
Campbellford	271 00	.....	271 00
Carleton Place	442 00	.....	442 00
Chesley	205 00	.....	205 00
Clinton	268 00	.....	268 00
Cobalt	72 00	*	72 00
Cobourg	396 00	171 00	567 00
Collingwood	803 00	*	803 00
Copper Cliff	252 00	.....	252 00
Cornwall	284 00	364 00	648 00
Deseronto	343 00	.....	343 00
Dresden	195 00	.....	195 00
Dundas	312 00	71 00	383 00
Dunnville	277 00	.....	277 00
Durham	190 00	.....	190 00
East Toronto	415 00	.....	415 00
Essex	143 00	.....	143 00
Forest	178 00	.....	178 00
Fort Frances	98 00	31 00	129 00
Galt	886 00	60 00	946 00
Gananoque	433 00	.....	433 00
Goderich	427 00	59 00	486 00
Gore Bay	91 00	.....	91 00
Gravenhurst	268 00	.....	268 00
Hanover	238 00	.....	238 00
Haileybury	135 00	.....	135 00
Harriston	181 00	.....	181 00
Hawkesbury	53 00	448 00	501 00
Hespeler	255 00	.....	255 00
Huntsville	257 00	.....	257 00
Ingersoll	453 00	56 00	509 00
Kenora	456 00	99 00	555 00
Kincardine	294 00	.....	294 00
Kingsville	174 00	.....	174 00
Leamington	314 00	.....	314 00
Lindsay	588 00	210 00	798 00
Listowel	260 00	.....	260 00
Little Current	98 00	.....	98 00
Massey	37 00	46 00	83 00

* Included in Public School Grant

APPORTIONMENT OF THE PUBLIC AND SEPARATE SCHOOL GRANT TO CITIES, TOWNS AND VILLAGES FOR 1907.—*Continued.*

TOWNS.—*Continued.*	Public Schools.	Separate Schools.	Total.
	$ c.	$ c.	$ c.
Mattawa	29 00	136 00	165 00
Meaford	261 00	.....	261 00
Midland	429 00	.....	429 00
Mitchell	207 00	.....	207 00
Milton	163 00	.....	163 00
Mount Forest	217 00	37 00	254 00
Napanee	308 00	.....	308 00
New Liskeard	162 00	.....	162 00
Newmarket	281 00	29 00	310 00
Niagara	158 00	.....	158 00
North Bay	307 00	216 00	523 00
North Toronto	284 00	.....	284 00
Oakville	174 00	23 00	197 00
Orangeville	286 00	.....	286 00
Orillia	465 00	123 00	588 00
Oshawa	513 00	49 00	562 00
Owen Sound	1,093 00	91 00	1,184 00
Palmerston	211 00	.....	211 00
Parkhill	140 00	25 00	165 00
Paris	361 00	45 00	406 00
Parry Sound	424 00	.....	424 00
Pembroke	388 00	251 00	639 00
Penetanguishene	321 00	.....	321 00
Perth	263 00	121 00	384 00
Petrolea	418 00	.....	418 00
Picton	387 00	35 00	422 00
Port Hope	493 00	.....	493 00
Powassan	68 00	.....	68 00
Prescott	234 00	101 00	335 00
Preston	235 00	63 00	298 00
Rainy River	165 00	43 00	208 00
Renfrew	194 00	149 00	343 00
Ridgetown	226 00	.....	226 00
St. Mary's	335 00	42 00	377 00
Sandwich	93 00	108 00	201 00
Sarnia	869 00	164 00	1,033 00
Sault Ste. Marie	733 00	132 00	865 00
Seaforth	194 00	48 00	242 00
Simcoe	341 00	.....	341 00
Smith's Falls	551 00	.....	551 00
Southampton	192 00	.....	192 00
Stayner	123 00	.....	123 00
Steelton	168 00	94 00	262 00
Sturgeon Falls	87 00	160 00	247 00
Strathroy	319 00	.....	319 00
Sudbury	150 00	203 00	353 00
Thessalon	144 00	.....	144 00
Thornbury	88 00	.....	88 00
Thorold	170 00	71 00	241 00
Tillsonburg	245 00	.....	245 00
Toronto Junction	1,111 00	.....	1,111 00
Trenton	307 00	80 00	387 00
Uxbridge	178 00	.....	178 00
Vankleek Hill	59 00	95 00	154 00
Walkerton	212 00	105 00	317 00
Walkerville	226 00	65 00	291 00
Wallaceburg	280 00	78 00	358 00
Waterloo	357 00	106 00	463 00

APPORTIONMENT OF THE PUBLIC AND SEPARATE SCHOOL GRANT TO CITIES, TOWNS AND VILLAGES FOR 1907.—*Continued.*

INCORPORATED VILLAGES.—*Continued.*	Public Schools.	Separate Schools.	Total.
	$ c.	$ c.	$ c.
Webbwood	77 00	.....	77 00
Welland	208 00	.....	208 00
Whitby	222 00	29 00	251 00
Wiarton	258 00	.....	258 00
Wingham	247 00	.....	247 00
Total	$34,757 00	$6,049 00	$40,806 00
INCORPORATED VILLAGES.			
Acton	192 00	.....	192 00
Ailsa Craig	72 00	.....	72 00
Alvinston	90 00	.....	90 00
Arkona	53 00	.....	53 00
Arthur	71 00	60 00	131 00
Athens	96 00	.....	96 00
Ayr	96 00	.....	96 00
Bancroft	58 00	.....	58 00
Bath	42 00	.....	42 00
Bayfield	51 00	.....	51 00
Beamsville	91 00	.....	91 00
Beaverton	106 00	.....	106 00
Beeton	83 00	.....	83 00
Belle River	.....	55 00	55 00
Bloomfield	78 00	.....	78 00
Blyth	104 00	.....	104 00
Bobcaygeon	105 00	.....	105 00
Bolton	70 00	.....	70 00
Bradford	110 00	.....	110 00
Bridgeburg	153 00	.....	153 00
Brighton	137 00	.....	137 00
Brussels	118 00	.....	118 00
Burk's Falls	111 00	.....	111 00
Burlington	154 00	.....	154 00
Caledonia	87 00	.....	87 00
Cannington	108 00	.....	108 00
Cardinal	128 00	.....	128 00
Casselman	8 00	68 00	76 00
Cayuga	84 00	.....	84 00
Chatsworth	44 00	.....	44 00
Chesterville	67 00	26 00	93 00
Chippawa	70 00	.....	70 00
Clifford	64 00	.....	64 00
Cobden	86 00	.....	86 00
Colborne	115 00	.....	115 00
Courtright	53 00	.....	53 00
Creemore	76 00	.....	76 00
Delhi	82 00	.....	82 00
Drayton	91 00	.....	91 00
Dundalk	92 00	.....	92 00
Dutton	104 00	.....	104 00
Eganville	69 00	52 00	121 00
Elmira	164 00	.....	164 00
Elora	114 00	22 00	136 00
Embro	61 00	.....	61 00
Erin	54 00	.....	54 00
Exeter	174 00	.....	174 00
Fenelon Falls	128 00	.....	128 00

APPORTIONMENT OF THE PUBLIC AND SEPARATE SCHOOL GRANT TO CITIES, TOWNS AND VILLAGES FOR 1907.—*Continued.*

INCORPORATED VILLAGES.—*Continued.*	Public Schools.	Separate Schools.	Total.
	$ c.	$ c.	$ c.
Fergus	155 00	11 00	166 00
Finch	37 00	.....	37 00
Fort Erie	105 00	.....	105 00
Garden Island	26 00	.....	26 00
Georgetown	167 00	.....	167 00
Glencoe	87 00	.....	87 00
Grand Valley	92 00	.....	92 00
Grimsby	103 00	.....	103 00
Hagersville	123 00	.....	123 00
Hastings	53 00	39 00	92 00
Havelock	115 00	.....	115 00
Hensall	91 00	.....	91 00
Hepworth	56 00	.....	56 00
Hintonburg	140 00	187 00	327 00
Holland Landing	43 00	.....	43 00
Iroquois	94 00	.....	94 00
Kemptville	156 00	.....	156 00
Lakefield	158 00	.....	158 00
Lanark	85 00	.....	85 00
Lancaster	61 00	.....	61 00
L'Orignal	110 00	29 00	139 00
Lucan	92 00	.....	92 00
Lucknow	114 00	.....	114 00
Madoc	119 00	.....	119 00
Markdale	109 00	.....	109 00
Markham	99 00	.....	99 00
Marmora	83 00	.....	83 00
Maxville	85 00	.....	85 00
Merrickville	113 00	.....	113 00
Merritton	140 00	38 00	178 00
Millbrook	89 00	.....	89 00
Milverton	92 00	.....	92 00
Morrisburg	153 00	.....	153 00
Newboro'	45 00	.....	45 00
Newburgh	52 00	.....	52 00
Newbury	44 00	.....	44 00
Newcastle	68 00	.....	68 00
New Hamburg	144 00	.....	144 00
Norwich	128 00	.....	128 00
Norwood	99 00	.....	99 00
Oil Springs	93 00	.....	93 00
Omemee	67 00	.....	67 00
Ottawa East	89 00	71 00	160 00
Paisley	100 00	.....	100 00
Point Edward	107 00	.....	107 00
Portsmouth	51 00	19 00	70 00
Port Carling	35 00	.....	35 00
Port Colborne	152 00	.....	152 00
Port Dalhousie	84 00	36 00	120 00
Port Dover	114 00	.....	114 00
Port Elgin	140 00	.....	140 00
Port Perry	136 00	.....	136 00
Port Rowan	65 00	.....	65 00
Port Stanley	69 00	.....	69 00
Richmond	50 00	.....	50 00
Richmond Hill	71 00	.....	71 00
Rockland	20 00	188 00	208 00
Shelburne	130 00	.....	130 00

APPORTIONMENT OF THE PUBLIC AND SEPARATE SCHOOL GRANT TO CITIES, TOWNS AND VILLAGES FOR 1907.—*Concluded.*

INCORPORATED VILLAGES.—*Concluded.*	Public Schools.	Separate Schools.	Total.
	$ c.	$ c.	$ c.
South River	77 00	.....	77 00
Springfield	50 00	.....	50 00
Stirling	94 00	.....	94 00
Stouffville	120 00	.....	120 00
Streetsville	61 00	.....	61 00
Sundridge	44 00	.....	44 00
Sutton	68 00	.....	68 00
Tara	64 00	.....	64 00
Teeswater	100 00	.....	100 00
Thamesville	86 00	.....	86 00
Thedford	66 00	.....	66 00
Tilbury	61 00	74 00	135 00
Tiverton	47 00	.....	47 00
Tottenham	60 00	.....	60 00
Tweed	121 00	27 00	148 00
Vienna	40 00	.....	40 00
Wardsville	33 00	.....	33 00
Waterdown	67 00	.....	67 00
Waterford	118 00	.....	118 00
Watford	138 00	.....	138 00
Wellington	75 00	.....	75 00
Weston	142 00	8 00	150 00
Westport	41 00	38 00	79 00
Winchester	130 00	.....	130 00
Woodbridge	63 00	.....	63 00
Woodville	48 00	.....	48 00
Wyoming	73 00	.....	73 00
Wroxeter	46 00	.....	46 00
Total	$11,995 00	$1,048 00	$13,043 00

SUMMARY OF APPORTIONMENT OF THE PUBLIC AND SEPARATE SCHOOL GRANT TO CITIES, TOWNS AND VILLAGES FOR 1907.

MUNICIPALITIES.	Public Schools.	Separate Schools.	Totals.
	$ c.	$ c.	$ c.
CITIES	52,590 00	13,693 00	66,283 00
TOWNS	34,757 00	6,049 00	40,806 00
VILLAGES	11,995 00	1,048 00	13,043 00
Totals	$99,342 00	$20,790 00	$120,132 00

May, 1907.

Legislative Grant for Rural School Equipment and Accommodations for 1907.

(Circular No. 22a.)

Apportionment of the sum of $60,000.00, set apart out of the General Legislative Appropriation to Public and Separate Rural Schools as Grants to such schools on the Value of the Equipment and Accommodations.

Under the provisions of Section 19, 70, (1), of an Act to amend the Public Schools Act, 1907, it is required that:—

"The Municipal Council of every organized county shall levy and collect by an equal rate upon the taxable property of the whole county, (not included in urban municipalities or annexed to any urban municipality for school purposes), according to the equalized assessments of the municipalities in the manner provided by this Act and the Municipal and Assessment Acts, a sum which shall be equal to at least that portion of the legislative grant which is apportioned by the Minister of Education on the basis of the equipment and accommodations of the Rural Public Schools and Separate Schools of the county, and such sums shall be payable to the Trustees of the respective schools receiving such legislative grants in the same proportions as the said grants are apportioned."

The following are the Departmental Regulations governing the distribution and payment of this grant:—

"In the Departmental distribution of the $60,000.00 grant on the equipment and the accommodations, this sum will be divided first by the total number of the teachers in the *Rural Public and Separate Schools* in the organized counties at the time the Inspector makes his report (excluding the teachers of Continuation Classes Grades A and B), the principal teacher being reckoned as a unit, and each assistant as a half. In case a teacher shall have been employed less than the full time during the year preceding July, he shall be reckoned, if a principal, as a half, and, if an assistant, as a quarter; provided, however, he shall have taught not less than half a year. The quotient thus obtained, multiplied by the number of teachers in each Inspectorate (reckoned as above), will give the total Legislative Grant to be distributed in each Inspectorate on the basis of equipment and accommodations. This part of the Legislative Grant will be paid by the Education Department at the same time and to the same officials as in the case of the other Legislative Grants.

"As soon as the *Public* or the *Separate School Inspector* concerned has secured the necessary data, and before December the first at the latest, he shall sub-apportion the Legislative Grant on the equipment and the accommodations *with the County equivalent*, amongst the schools in his Inspectorate, in accordance with the scheme under Section IV., Circular of Instructions, No. 12, which defines the application of said grants for equipment and accommodations. As in the case of the other grants, these grants will be payable to each Section Treasurer by the County Treasurer, or the Township Treasurer, as the case may be, on the order of the Inspector concerned. If said grants are payable by the Township Treasurer, the Inspector, when he has made his sub-apportionment, shall notify the County Treasurer of the amount due the Township Treasurer on this account."

Legislative Grant payable to Rural Public and Separate Schools on the value of the school equipment and the character of the accommodations for 1907.

County.	Public School Inspectorate.	Amount of Legislative Grant to Rural Public Schools for which an equivalent is to be provided by County Councils and the sum of the two grants sub-apportioned by the Public School Inspector concerned to his Rural Public Schools.	Amount of Legislative Grant to Rural Separate Schools for which an equivalent is to be provided by County Councils and the sum of the two grants sub-apportioned by the Separate School Inspector concerned to his Rural Separate Schools.	Total amount of Legislative Grant for equipment and accommodations of Rural Public and Separate Schools, for which an equal amount is to be raised by the respective County Councils.
		$ c.	$ c.	$ c.
Brant	Brant	753 44		753 44
Bruce	Bruce, East	1,033 78		
	Bruce, West	969 54		2,003 32
Carleton	Carleton	1,501 03		1,501 03
Dufferin	Dufferin	1,080 51		1,080 51
Elgin	Elgin	1,261 55		1,261 55
Essex	Essex, North (No. 1).	379 63		
	Essex, South (No. 2).	934 48		1,314 11
Frontenac	Frontenac	1,565 26		1,565 26
Grey	Grey, East	805 99		
	Grey, West	858 57		
	Grey, South	1,010 42		2,674 98
Haldimand	Haldimand	911 14		911 14
Haliburton	Haliburton	718 39		718 39
Halton	Halton	671 67		671 67
Hastings	Hastings, N. (No. 1).	1,197 32		
	Hastings, S. (No. 2).	817 68		2,015 00
Huron	Huron, East (N)	1,013 34		
	Huron, West (S)	1,179 80		2,193 14
Kent	Kent, East	732 99		
	Kent, West	846 88		1,579 87
Lambton	Lambton, East (No. 2)	1,045 46		
	Lambton, West (No. 1)	952 00		1,997 46
Lanark	Lanark	1,264 48		1,264 48
Leeds and Grenville	Leeds, No. 1	911 13		
	Leeds, No. 2	981 22		
	Leeds, No. 3 and Grenville	776 79		2,669 14
Lennox and Addington	Lennox and Addington	1,343 33		1,343 33
Lincoln	Lincoln	762 19		762 19
Middlesex	Middlesex, East	1,226 51		
	Middlesex, West	922 80		2,149 31
Norfolk	Norfolk	1,185 64		1,185 64
Northumberland and Durham	Durham	1,168 11		
	S. Monaghan	58 40		
	Northumberland	1,197 32		2,423 83
Ontario	Ontario, North	718 39		
	Ontario, South	668 75		1,387 14
Oxford	Oxford	1,337 49		1,337 49
Peel	Peel	899 43		899 43
Perth	Perth	1,337 49		1,337 49
Peterborough	Peterborough	1,103 86		1,103 86
Prescott and Russell	Prescott	689 18		
	Russell	420 51		1,109 69
Prince Edward	Prince Edward	864 41		864 41
Renfrew	Renfrew	1,763 84		1,763 84

Legislative Grant to Schools—Continued.

County.	Public School Inspectorate.	Amount of Legislative Grant to Rural Public Schools for which an equivalent is to be provided by County Councils and the sum of the two grants sub-apportioned by the Public School Inspector concerned to his Rural Public Schools.	Amount of Legislative Grant to Rural Separate Schools for which an equivalent is to be provided by County Councils and the sum of the two grants sub-apportioned by the Separate School Inspector concerned to his Rural Separate Schools.	Total amount of Legislative Grant for equipment and accommodations of Rural Public and Separate Schools, for which an equal amount is to be raised by the respective County Councils.
		$ c.	$ c.	$ c.
Simcoe	Simcoe, North	692 10		
	Simcoe, South-west	1,068 82		
	Simcoe, East	776 79		2,537 71
Stormont, Dundas and Glengarry	Stormont	928 67		
	Dundas	911 12		
	Glengarry	870 25		2,710 04
Victoria	Victoria, East	478 92		
	Victoria, West	759 27		1,238 19
Waterloo	Waterloo, No. 1	473 08		
	Waterloo, No 2	584 05		1,057 13
Welland	Welland	969 53		969 53
Wellington	Wellington, North	876 09		
	Wellington, South	817 68		1,693 77
Wentworth	Wentworth	969 53		969 53
York	York, North	934 48		
	York, South	1,095 10		2,029 58
	Separate School Inspectorates.			
Rural Roman Catholic Separate Schools	Inspector Prendergast	.....	204 41	204 41
	Inspector O'Brien	.....	657 06	657 06
	Inspector Power	.....	613 25	613 25
	Inspector Rochon	.....	1,133 07	1,133 07
	Inspector Chenay	.....	344 59	344 59
		57,047 62	2,952 38	$60,000 00

Notice to the County Clerk.

Roman Catholic Rural Separate Schools.—As the districts of the Inspectors of the Roman Catholic Separate Schools comprise more than one county, the Legislative Grant due the Rural Roman Catholic Separate Schools in each county on the basis of the value of the equipment and the character of the accommodations cannot be exactly apportioned until the Inspector has distributed amongst his schools the share of the total grant apportioned by the Education Department to his Inspectorate. Due notice of the amount in question will be sent each County Clerk in time for the payment to each Separate School Treasurer before the 1st December, of the Legislative and the County Grants due the Separate Schools of each County on the aforesaid basis. The total amounts for the Rural Schools in each Separate School Inspectorate are as above.

June, 1907.

Empire Day.

The Regulations of the Department of Education require that "Empire Day," (the first school day before the 24th of May), Thursday, the 23rd of May, shall be duly celebrated in each school. The forenoon is to be devoted to a study of the greatness of the British Empire, and the afternoon to public addresses, recitations, music, etc., of a patriotic character.

The morning should be mainly occupied by the teacher in a discussion on the extent of the Empire, its history and resources. Mention might be made of the most noted Statesmen, Military and Naval Heroes, and those prominent in Literature, Science, Art, etc.

Emphasis could be laid upon the fact that all British subjects are specially blessed and privileged in living under a constitutional form of Government, such as ours. The systems of Dominion, Provincial, Municipal and Educational Governments might also be concisely referred to. A geographical illustration from the map of the world of the various possessions of the British Empire might also be a feature of the morning's exercises.

In the afternoon a miscellaneous programme of patriotic recitations, songs, readings by the pupils, and addresses by trustees, clergymen, and others could be profitably carried out.

During the day the "Union Jack" or the "Canadian Ensign," or both, should be hoisted over the school building.

The British Empire.

Facts for the Scholars.

It may be interesting to know that you can say: I am a subject of King Edward VIIth, and a citizen of the British Empire.

The full title of King Edward the VIIth is:—His Most Excellent Majesty, Edward the Seventh, by the Grace of God, of the United Kingdom of Great Britain and Ireland, and of all the British Dominions beyond the seas, King, Defender of the Faith, Emperor of India.

That portion of the Earth's land surface which is subject to the authority of King Edward the VIIth is the British Empire. Its extent is about 12 million square miles (12,000,000 sq. m.); of these only 121,000 sq. miles are in the United Kingdom.

The British Empire covers about one-fifth or 21 per cent. of the earth's surface.

The extent of the British Empire is greater than that of any other State. The Nations outside the British Empire possessing the largest extent of territory are: Russia, 8,000,000 square miles; United States, 3,623,000 square miles; Brazil, 3,220,000.

The number of the subjects of King Edward VIIth is about 400 millions (400,000,000), or about one-fifth or about 22 per cent. of the inhabitants of the earth. Of these only about 43 millions (43,000,000) live in the United Kingdom.

The population of the British Empire is about equal to that of China, and more numerous than that of any other country.

The most populous countries outside the Empire are:—

China with about .....400,000,000 people.
Russia " " .....130,000,000 "
United States ..... 84,000,000 "

The numbers of the inhabitants of the principal cities in different parts of the Empire are:—

London	4,648,950
Calcutta	910,117
Glasgow	798,337
Manchester and Salford	786,921
Bombay	776,006
Liverpool	723,430
Birmingham	537,965
Sydney	511,030
Madras	509,346
Melbourne	496,079
Dublin	378,994
Montreal	267,730
Johannesburg	155,642
Cape Town	77,668
Wellington, New Zealand	49,344
Ontario—Toronto	253,720
Hamilton	61,443
Ottawa	67,572
London	44,704

The extent of the British Empire in square miles, in each continent is—

In America over 4 millions of square miles	4,000,000
" Australia " 3 " " " "	3,000,000
" Africa 2½ " " " "	2,500,000
" Europe about 122,000 " "	122,000

The numbers of the subjects of King Edward in each continent are:—

In Asia about 300 millions	300,000,000
" Africa " 43 "	43,000,000
" Europe " 43 "	43,000,000
" America about 7½ "	7,500,000
" Australasia about 5 millions	5,000,000

The inhabitants of the earth vary in race, and in the colour of their skins. The principal colours are white, copper, yellow, and black. Among all of these races and colours are the subjects of King Edward to be found. Of these about 54 millions (54,000,000) are white, and 344 millions (344,000,000) coloured.

The inhabitants of the earth belong to many religions. The principal are the Christian, Mohammedan, Buddhist, and Hindu Religions. There are besides many Pagans. Subjects of King Edward will be found among all of these Religionists.

The numbers of the subjects of King Edward belonging to the principal religions are:—

About 208 million Hindus	208,000,000
" 94 " Mohammedans	94,000,000
" 58 " Christians	58,000,000
" 12 " Buddhists	12,000,000
" 23 " of other religions and Pagans	23,000,000

The value of the total trade of the British Empire in the year 1904 was: Thirteen Hundred and Five Million Pounds (£1,305,283,000), of which 73.3 per cent. was with foreign countries, and 26.7 per cent. between different parts of the Empire.

The amount of tonnage of steam and sailing vessels owned by the Empire is—

9,426,493 tons of steamships, and
2,729,608 tons of sailing vessels.

Total 12,156,101 tons.

About half the shipping of the world.

The Anual Revenue of the British Empire is about Two Hundred and Fifty Million Pounds (£250,000,000).

Different portions of the British Empire are governed in different ways. Some portions like the United Kingdom, the Canadian Dominion, the Australian Commonwealth, New Zealand, Cape Colony, Natal, and Newfoundland, are self-governing; others are partly self-governed and partly governed by officials appointed by the British Government; and others again like India, are governed by officials appointed by the Home Government; but all acknowledge allegiance to the King-Emperor.

The duties of British subjects towards their Sovereign are: To honour and obey Him.

It is the duty of British subjects to honour and obey the King, because King Edward the VIIth represents the Majesty and Honour of the Empire, and because, as a constitutional Sovereign, he has sworn to uphold the laws, and to govern his subjects with justice and equity.

The duties of a citizen of the British Empire are: to be the loyal friend of all fellow subjects of the King-Emperor: so to live as never to bring reproach by word or deed on the Empire of which he is a citizen. To prepare himself by every means in his power to advance the welfare of his fellow citizens, whether in peace or war, whatever may be their class, creed or colour.

A citizen of the British Empire owes duties to the State because citizens of the British Empire enjoy privileges, and an amount of personal liberty and freedom greater than those enjoyed by the citizens of any other State in the world, and therefore owe loyalty and gratitude to the Empire which protects them in the enjoyment of these privileges, liberty and freedom.

The "EMPIRE DAY" movement is an effort throughout the King-Emperor's Dominions to remind all British subjects of the virtues which make a good citizen, such as loyalty, patriotism, courage, endurance, respect for, and obedience to, lawful authority, and to encourage self-sacrifice for the public good; to teach all, and especially the young, the sacredness of the trust committed to them, and to inspire them with determination to do their duty, and should be promoted by every British subject.

May 24th is annually observed in the other Dominions of the King-Emperor as "Empire Day."

May 24th was the birthday of the late good Queen Victoria, during whose reign of 63 years the Empire grew to its present greatness, as year by year her people increased in health, strength, numbers, wealth and happiness.

The "Motto" of the Empire Day movement is: "One King, One Flag, One Fleet, One Empire."

The name of the British National Flag is: The "Union Jack."

It is called the "Union Jack" because it is union of the English, Scotch and Irish national ensigns or "Jacks": The Crosses of St. George, St. Andrew and St. Patrick.

The "Union Jack" should be flown on "Empire Day" from all public buildings, and church and chapel towers and steeples, and from private buildings.

God Save the King.

The Flag of Britian.

Dedicated to the Right Hon. The Earl of Meath, in recognition of his efforts to cherish patriotism in the hearts of the children of Great Britain, Ireland, and the Colonies.—E. A. Walker.

Flag of Britain, proudly waving, over many distant seas;
Flag of Britain, boldly braving blinding fog and adverse breeze.
*We salute thee, and we pray, bless, O God, our land to-day.
Flag of Britain! where-so-ever thy bright colours are out-spread;
Slavery must cease for ever, light and freedom reign instead.
*We salute it, and we pray, bless, O God, our land to-day.
Flag of Britain! mid the nations, may it ever speak of peace,
And proclaim, to farthest stations, all unworthy strife must cease.
*We salute it, and we pray, bless, O God, our land to-day.
But if duty sternly need it, freely let it be unfurl'd,
Winds of Heaven then may speed it to each quarter of the world.
*We salute it, and we pray, bless, O God, our land to-day.
Love of it, across the waters passing with electric thrill,
Binds our distant sons and daughters, heart to heart with Britain still.
*We salute it, and we pray, bless, O God, our land to-day.
Regions East and West united, all our Empire knit in one;
By right loyal hearts defended, let it wave beneath the sun.
*We salute it, and we pray, bless, O God, our land to-day.

*At the words "we salute thee" the hand should be raised in the attitude of salute, At the words "and we pray" the head should be bowed, still retaining the hand at the salute. It is desirable that a large Standard should be raised during the singing of the song.

May, 1907.

Changes in the High and Public Schools Acts.

(Circular No. 15a.)

Circular to School Officials and Municipal Councils.

The following are the amendments made last Session to the High and the Public Schools Acts, which it is necessary for County Councils to consider in striking the rates for the present year.

Continuation Classes.

Section 8 of the Public Schools Act has been amended by adding thereto the following as sub-section 7:—

(7) Where the Board of Trustees of a union school section establishes continuation classes in the union school, or joins with one of more other Boards of Trustees in establishing such classes as hereinbefore provided, the Municipal Council of each municipality having the whole or part of its territory within the union school section shall levy and collect upon the taxable

property of such union school section within its jurisdiction, its proper share of the expense of establishing and maintaining the said continuation classes according to the equalized assessment of each portion of the said union school section in the respective municipalities.

Under section 8, sub-section 6, of the Public Schools Act of 1901, amended by section 5 of the Amending Act of 1906 (or in the case of R. C. Separate Schools, sec. 2, subsec. 6, of the Act of 1902, to amend the Separate Schools Act), the Municipal Council of the County shall pay for the maintenance of Continuation Classes a sum equal to the Legislative Grant apportioned by the Minister of Education for such Classes, and any further sums the Municipal Council may deem expedient. In 1906 the Legislature voted $32,000.00 for Continuation Classes. Last session it voted $40,000.00 for the current year. As this Grant cannot be apportioned until after the close of the school year, the Minister is unable to state at present the exact total amount required from each County as the equivalent to its share of this sum. It would be well, however, for each County Council to increase proportionately its grant for the same purpose.

County and Township Rates.

Subsections 1, 2, 3, 4, 5 and 6 of section 70 of the Public Schools Act, as enacted by section 39 of the Act passed in the 6th year of His Majesty's reign, Chaptered 53, have been repealed, thus rescinding the minimum salary provisions except as provided in (4) below. The following subsections have been substituted for the aforesaid subsections:—

70. (1) The Municipal Council of every organized county shall levy and collect by an equal rate upon the taxable property of the whole county, (not included in urban municipalities or annexed to any urban municipality for school purposes) according to the equalized assessments of the municipalities in the manner provided by this Act and the Municipal and Assessment Acts, a sum which shall be equal to at least that portion of the legislative grant which is apportioned by the Minister of Education on the basis of the equipment and accommodations of the rural Public and Separate Schools of the county, and such sums shall be payable to the Trustees of the respective schools receiving such legislative grants in the same proportions as the said grants are apportioned.

(2) Where the assessed value according to the equalized assessments aforesaid, of all the taxable property of the Public School supporters in any township in an organized county, is at least equal to an average annual assessment of $30,000 for each Public School section therein the Municipal Council of such township shall, each year, levy and collect by assessment upon the taxable property of the Public School supporters of the whole township (not included in urban municipalities or annexed to any urban municipality for school purposes) in the manner provided by this Act and the Municipal and Assessment Acts, the sum of $300 at least for every Public School where the teacher or principal teacher is engaged for a whole year exclusive of vacations, and a proportionate amount of such sum of $300 at least where a teacher or principal teacher is engaged for six months or longer; and the additional sum of at least $200 for every assistant teacher engaged for a whole year exclusive of vacations, and a proportionate amount of such sum of $200 at least for every assistant teacher engaged for six months or longer.

(3) In every organized county where such assessed value, according to the equalized assessments aforesaid, is less than an average annual assessment of $30,000 for each Public School section in any township, and in every organized township in the territorial or judicial districts, whatever its assess-

ments may be, the Municipal Council of such township shall, each year, levy and collect as aforesaid the sum of $150 at least for every Public School where a teacher or principal teacher is engaged for a whole year exclusive of vacations, and a proportionate amount of said sum of $150 at least where a teacher or principal teacher is engaged for 6 months or longer; and an additional sum of at least $100 for every assistant teacher engaged for a whole year exclusive of vacations, and a proportionate amount of such sum of $100 at least where such assistant teacher is engaged for 6 months or longer.

(4) The sums so levied and collected by the council of the township shall be applied exclusively to teachers' salaries.

The portion of the Legislative Grant which is apportioned by the Minister of Education on the basis of the equipment and accommodations of the rural Public and Separate Schools is $60,000.00. Last year the Counties raised the equivalent of a special grant of $60,000.00 to rural Public and Separate Schools. The amount thus raised by each County under the Act of 1906 will be about the amount required to be raised this year under the amended Act of 1907. (Section 70 (1) quoted above.)

County Clerk.

Section 73 of The Public Schools Act has been amended by adding thereto the following subsection:—

(2) It shall be the duty of the clerk of every county to furnish the Public School Inspector forthwith on demand with such school statistics in regard to assessments as the Minister of Education may direct.

Public School Inspectors.

Subsection 3 of section 86 of the Public Schools Act as enacted by section 46 of the said Act, passed in the 6th year of His Majesty's reign, Chaptered 53, has been amended, adding at the end of the said subsection 3 the following paragraph:—

In any county in which any Public School Inspector has charge of less than 140 schools or departments with separate registers the appointment of an additional Inspector shall be subject to the approval of the Lieutenant-Governor in Council.

Subsection 8 of section 86 of The Public Schools Act, as enacted by section 47 of the said Act, passed in the 6th year of His Majesty's reign, has been amended by inserting before the word "postage" in the ninth line the word "printing."

Maintenance.

Notwithstanding anything contained in section 34 of The High Schools Act and the amendments thereto, the liability of any municipality under subsections 6, 7 or 9 of the said section as amended shall be determined as follows:—

From the total cost of maintenance of the High School there shall be deducted the amount of the legislative grant,—the remainder shall be divided by a number representing the total number of days' attendance of all pupils at such High School during the year for which payment is to be made and the resulting amount shall be multiplied by the total number of days' attendance of pupils in respect of whom such municipality is liable, the percentage mentioned in the subsection under which payment is to be made shall then be determined, and from this amount the fees paid by such pupils shall be deducted, and the resulting amount shall be the amount payable by such municipality.

May, 1907.

Special Professional Summer Schools in 1907.

(Circular No. 61.)

In accordance with "An Act respecting the Qualifications of Certain Teachers," of 1907,

For members of the Roman Catholic Educational and Religious Communities,

To be held at

Ottawa: For English-French teachers, in the D'Youville Separate School; for other teachers, in the Normal School;

Peterborough: In St. Peter's Separate School;

Toronto: For male teachers, in De La Salle Separate School; for female teachers, in Toronto University;

Hamilton: In the St. Anne's Separate School;

Berlin: In the St. Mary's Separate School;

London: In the Sacred Heart Separate School.

Session: Begins at 2 p.m. on July 3rd, and lasts till August 3rd.

Syllabus of the Course of Studies.

I.—*Educational Principles and Methodology.*

Note.—The course in Methodology will be based on McMurray's "Method of the Recitation."

Aim of Education.—Individual and social phases of education; their relation.

The Educational Process.—Its nature and relation to the end and means of education.

Subject Matter of Instructions.—The principle of correlation and concentration of studies.

Method of Instruction.—The relation of method to subject matter; the problem of method of a psychological problem.

Ultimate Modes of Being Conscious.—Involution of phases; self-consciousness and self-activity.

Habit and Association.—Primary instincts or inherited co-ordination; relation of habit to primary instincts; bodily conditions of the formation of habits; functions and limitations of habit; nature of association; conditions of association; varieties of association; relation of association to habit; how to form permanent associations.

Attention.—Nature of attention as a process; conditions of attention; relations of attention to habit and association; interest, its nature and relation to attention; voluntary and non-voluntary attention distinguished; attention in young children and in adults compared; divided attention and concentration of attention; securing and retaining attention; obstacles to attention.

Apperception and Retention.—Meaning of the terms; their relation; mental assimilation, growth and development.

Laws of Mental Development.—General principles of development; the transition from the practical to the intellectual attitude in learning; stages of intellectual development.

Individual and General Notions.—How they are distinguished from each other; how individual notions should be approached and presented; how to proceed from individual to general notions; the value of types in the development of general notions; how general notions should be applied.

Laws underlying the Process of Teaching.—The relation of analysis to synthesis, of induction to deduction.

II.—*School Management.*

The School.—Its functions; scope of school management; responsibility of teachers and trustees.

Building and Grounds.—Requirements regarding sites, buildings, furniture, decoration, heating, lighting, and ventilation.

Physical Culture.—Its importance, its place in school; personal hygiene, importance of cleanliness; dangers of fatigue; games, gymnastics, calisthenics, military drill.

Moral Training.—Basis of; need of moral training; intellectual growth related to moral training; the personality of the teacher; moral value of discipline and good teaching; incidental moral instruction; moral value of school studies; character building the true end of education; training of the will; formation of tastes and habits; importance of regularity, punctuality, industry, obedience, truthfulness, honesty, courtesy, self-control, etc.

Discipline.—Qualifications of the good teacher—scholarship, professional attainments, executive ability, tact, etc.; aim of discipline; characteristics of good discipline; conditions of discipline; devices of discipline; methods of dealing with difficulties.

School Incentives.—Need of incentives; choice of motives; artificial incentives—prizes, privileges, exemptions; natural incentives—desire for good standing, for knowledge, for approbation; love of activity, of self-control; hope of future success; sense of honour, of right, of duty.

Punishments.—Need of punishments; the basis and ends of punishment; misconceptions to be avoided; characteristics of proper punishments; the discipline of consequences; judicious punishments; injudicious punishments; corporal punishment.

School Organization.—Its nature and advantages; difficulties to be met; grades of schools; characteristics of rural schools; basis of classification; disadvantages of ungraded schools; the first day; plans to be formed; delays to be avoided; size of classes; mixed classes; promotions.

School Programmes.—Advantages of prescribed courses; value of subjects; co-ordination, correlation, and concentration of studies; fixed courses; optional subjects; time-tables for rural and urban schools; recesses; school records.

Recitations.—Their importance; preparation by teacher and pupils; manner of the teacher before the class; value of method; oral and written work; empirical, developing, lecture, conversational and other methods; illustrative teaching; analytic and synthetic methods; inductive and deductive methods, auxiliary methods; faulty teaching.

The Art of Questioning.—Its aims; its abuse; the teacher's pre-requisites; matter, form, kind, and order of questions; faulty questions; testing and training questions; class questioning—simultaneous, consecutive, promiscuous, and combined methods; forms of answers; criticism of answers.

Written Examinations.—The objects and advantages; training examinations; tests of promotions; qualifying examinations; examination questions; objections considered; defects of written examinations; evils of competitive examinations.

III.—*School Programme of Studies.*

The following courses are intended to enable the teacher to deal effectively with the various subjects included in the official programme of studies for Public and Separate Schools. In connection with each of these courses the

rationale and the sequence of the details of each of the prescribed subjects will be systematically developed; also the proper use of the equipment prescribed by the Regulations.

Grammar.

Meaning of English Grammar; its relation to speech, composition, and literature; discussion of reasons for its place in a course of study; its scope and aims; course for elementary schools.

Principles to be observed in teaching; order and method of early lessons; value of correct definitons; how reached; how applied; analysis and parsing, purpose and value of each, method of teaching; emphasis on classification or on function; oral and written exercises; proper use of false syntax.

Spelling.

Aims in teaching spelling; its place in the elementary school; its relation to other subjects. Teaching spelling, not merely testing.

Methods: association of eye, ear, and hand; oral spelling; transcription; sight spelling; memory spelling, word building, phonic spelling, advantages and disadvantages of each; spelling rules, value, how taught.

Lesson procedure in junior forms, in senior; choice of material; number of words; teaching word forms; detection of errors; correction of errors; spelling drills and reviews; use of spelling book.

Language.

Adequate knowledge of the mother tongue the foundation of education; influences opposed to good usage; clearness of speech attainable by all; aim of teaching to make good English a fixed, unconscious habit; habit acquired through the teacher's critical oversight, and unconsciously by reading good literature and associating with those who speak good English.

To observe, to think, to express, the right order; weakness of teaching mere formal linguistic exercises; relation of language to other school studies.

Imitation of good examples the foundation; steady pressure and unremitting attention by the teacher essential; eradicating faulty habits of speech; much of the best teaching incidental; extending and clarifying the vocabulary; discussion of the value of some language-lesson books.

Composition.

Aims of teaching Composition; connection between oral and written composition; difficulties and how to overcome them; some themes to be taken from the pupils' experiences; others, from the Literature, History, and other lessons; the structure of paragraphs and of sentences; the use of capitals and punctuation marks; letter writing; direct and indirect narration; paraphrasing; introduction of grammatical equivalents; change of construction; how to deal with false syntax; methods of teaching compostion, with illustrations; correction of compositions.

Literature.

The nature and interpretation of Literature; aims in teaching literature; kinds of literature adapted to different grades.

Methods varied according to the grade of pupil, and the kind of literature. Memorization of selections; the study of the author's life.

Aids in teaching; appreciation of literature by the teacher; reading of good literature by the teacher to the pupils; abundant supply of good literature for schools; relation of schools to school and public libraries; the use of annotated editions.

Reading.

Aims in teaching Reading; general principles in teaching primary reading; methods of teaching to read—alphabetic, phonic, phonetic, word—the advantages and disadvantages of each method; methods of presenting first reading lessons; qualities of good reading and how to secure each; audibility, enunciation, articulation, pronunciation, fluency, time, and expression. simultaneous reading; reading from imitation; supplementary readers. Detection and correction of errors; drawing; stammering; monotone, etc.

Geography.

What Geography comprises; its relation to other subjects; Geography and Nature Study. Aims in teaching Geography.

Order of stems—observe, express, reason; necessity for thorough study of home locality; dependence of early lessons upon environment or suggestive incident.

Geographical excursions; value; how conducted.

Teaching ideas of time, distance, size. Representation through modelling or map drawing; teaching pupils to draw maps, to read maps; weather observations and records; simple geographical experiments; full, well assimilated knowledge of important points, the aim.

Mathematical geography. Political geography of home locality; relation of this locality to whole country; of the country to the world at large.

Right order of topics in teaching a continent or a country; use of a textbook; common mistakes in teaching Geography.

Preparation of his work by the teacher; equipment of the school; books for the pupils.

History.

Uses of History—for guidance, for culture, for intellectual training, for imparting a love of country; what is implied in knowing history; where and when to begin; methods of teaching it—chronological, topical, analytical—the value and application of each; selection of facts to be taught; historical perspective; dates; use of biography, with examples from Canadian and British history; topics in Canadian and British history; the poetry of history; civics.

Sources of information; oral teaching and the use and abuse of textbooks; use of local history and general knowledge; common mistakes in method; preparatory lessons; how to arouse interest; requirements of the teacher.

Arithmetic.

Aims in teaching Arithmetic; general principles to be observed; common errors in teaching arithmetic and how to avoid them.

The use of concrete objects such as kindergarten sticks, cubes, etc., in teaching notation and numeration; how to teach the numbers from 1 to 9, from 10 to 20, etc., number pictures, etc.

How to introduce the simple rules; devices to insure accuracy and rapidity in addition; the method of decomposition in subtraction; the method of equal additions; the method of complementary additions; the two methods

of decomposition and equal additions compared; how to teach the multiplication table; multiplcation by one figure, by factors, by two figures, etc.; connection of division with subtraction; its connection with multiplication; which should be taught first, long or short division; division of factors: merits and limitations of the unitary method; weights and measures; use of apparatus.

Methods of introducing fractions and connecting them with previous rules; the fraction considered as an equal part of a unit, and as a quotient; methods of deducing the different rules in fractions; decimal fractions; methods of deducing the different rules in decimals; recurring decimals.

Practice, commission, interest, discount, stocks; the metric system of weights and measures.

Methods of finding the area of the rectangle, triangle, circle, trapezium; the volume of the rectangular solid, the right cylinder, the cone, and the pyramid.

Nature Study.

Aims in conducting Nature Study; Nature acquaintance; methods of Nature Study; correlation with other subjects; distinction between Nature Study and Science in aim and spirit; nature collections, their use and abuse; field excursions, their purpose, and the manner of conducting them; uses of school gardens, how to prepare them; illustrations of the work in the different school forms.

Art.

Aims in teaching Art; form study, drawing, and colour-work; relation to other school subjects; methods of teaching; illustrations of the work in the different school forms.

Constructive Work.

Aims in teaching Constructive Work; various kinds of, with the particular purposes of each; relation to other school subjects, and to the work of practical life; methods of teaching; illustrations of the work in the different school forms.

June, 1907.

Summer Schools for Teachers, 1907.

Arrangements have been made by the Education Department for the holding of a Summer School for Teachers, at the Ontario Agricultural College, Guelph.

The term will be for four weeks, commencing Tuesday, July 2nd, and closing Saturday, July 27th.

Instruction will be given in three distinct Courses and students may select any one of these:

(1) Nature Study (correlated with Art and Constructive Work.)
(2) Manual Training.
(3) Household Science.

Courses of Study.

Nature Study.

In general, the mornings will be devoted to work indoors, and the afternoons, to work in the fields and woods. When weather will not permit of

field work, laboratory exercises will be substituted. Saturdays will be for all-day excursions, or reviewing and arranging the week's work. During the first week, the afternoon excursions will be to the different Departments of the College, where demonstrations and explanations of their work will be given. Such students as wish to spend their time in independent work along special lines will be encouraged to do so and given every possible assistance.

Arrangements will be made so that the summer's work may be continued in subsequent years and lead to a special certificate in Rural Science.

8.30 to 9.00—Preparation, Attending to Gardens, Pressing Plants, etc.

9.00 to 9.30—General Discussions on Work and Observations of Previous Day.

	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.
9.30 a.m. to 12.00 [noon	A. Art.	B. Art.	A. Constructive Work.	B. Constructive Work.	Bacteriology.
	B. Animal study.	A. Animal Study.	B. Plant Study	A. Plant Study,	Chemistry. Physics.
1.30 to 5.00 p.m.	Field Excursions.				Visiting local industries.

Outline of Work.

Excursions: Daily excursions, aiming at practical acquaintance with the common Birds, Trees and Shrubs, Wild Flowers and Plants, Ferns, Weeds, Insects, Rocks, Soils. Visits will also be made to the Dairy, the Poultry, the Horticultural, Forestry, Farm and Experimental Departments for the purpose of observing the character of the work done in each; the whole college will be used to instruct and exemplify in the forms and forces of nature observable in Agriculture.

Collections: Students will be instructed in making Nature collections to illustrate the field work and lectures. This will include Wild Flowers, Noxious Weeds, Grasses, common Ferns, Forest Trees, as shown by leaves and fruit, seeds of Noxious Weeds, groups of Insects to illustrate the principal orders, etc. Materials for collecting and preserving the above will be furnished to students, who will be expected to prepare the needed apparatus.

Gardening: Instruction and practice will be given in this branch of Nature study. The gardens of the Consolidated School will be used for these purposes.

Art and Constructive Work: The course in Art will include colour work and will consist of practical instruction in (1) Model Drawing, (2) Drawing of common subjects, (3) Drawing of flowers and plants suitable for the Public School course. In Constructive Work, the work will be in the line of that presented in the Public School course and preparing equipment for Nature Study work.

Laboratory Work and Lectures: Discussions will be frequently held on the methods of teaching, etc.; short courses of lectures will be held in Chemistry, Physics and Bacteriology as related to Agriculture. The laboratory exercises will be regulated by and explanatory of field work.

Laboratory Charges: There will be no tuition fee, but a deposit of five dollars will be required to cover the cost of materials supplied. Any balance will be refunded.

Equipment: Teachers should bring with them any good manuals that they have on the subjects of the course, shoes and clothing suitable for field and wood, a field or opera glass, a good pocket lens and a penknife, plant can, etc.

Manual Training.

This will include Art Work as for Nature Study Class, Woodwork, Clay Modelling, Cardboard Construction, and Basketry, including work in Raffia.

The work in this department will be varied to suit the special needs of each student, and the time-table will be arranged accordingly, when the class is organized on July 2nd.

The course will cover, as far as time permits, the work as described in the Departmental Regulations for Public Schools.

Household Science.

The classes will be held in the Macdonald Institute.

The course will include the following:

14 practical lessons in Plain Cookery.
14 " " " Plain Sewing.
7 " " " Laundry.
12 lectures on the Home—its functions, sanitation and care.
15 lectures on Foods by the various instructors of the Animal Husbandry, Dairy, Horticulture, Bacteriology, and Home Economics departments.

The lessons and lectures will be distributed as follows:

Programme.

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
8.45—9.35	Lecture	Lecture	Lecture	Lecture	Lecture	
9.35—10.25	Laundry	Cookery	Cookery	Cookery	Cookery	
10.25—11.15	Laundry	Cookery	Cookery	Cookery	Cookery	
11.15—12.05	Laundry	Cookery	Cookery	Cookery	Cookery	
12.05—1.30	Dinner.					
1.30—2.20	Sewing	Sewing	Laundry	Sewing	Sewing	
2.20—3.10	Sewing	Sewing	Laundry	Sewing	Sewing	
3.10—4.00	Lecture	Lecture	Laundry	Lecture	Lecture	

Students are required to bring with them two plain cotton dresses, at least two large white bib aprons, and two small hand towels for wear in the laundry and cooking lessons. The work in these classes will be practical.

Faculty.

Prof. S. B. McCready will have charge of the work in Nature Study; Prof. John Evans, in Manual Training, and Miss M. U. Watson in Household Science; and each will be assisted by other specialists in their several departments.

Special Lecturers.

Experts will be invited from other institutions in Canada and the United States to come here and deliver lectures on special topics of interest to teachers.

General Information.

Classes will organize at 2 p.m., Tuesday, July 2nd.

There will be no examination on any of the work.

Certificates of attendance will be issued to those who show satisfactory application and proficiency.

No fees of any kind will be charged for the course.

Gentlemen will find comfortable boarding homes in the city of Guelph. Street cars connect the city with the College.

NOTE.—Arrangements have been made with the Railway Passenger Association allowing a round trip rate of a fare and a third. Students must get a standard certificate from their local agent at the time of purchasing a single fare ticket to Guelph; the return ticket will then be issued at a one-third rate.

Macdonald Hall.

This is a beautiful residence building and the College authorities have made arrangements to throw it open for the use of the teachers during the month of July. The Hall will accommodate one hundred and ten ladies and rooms will be reserved in the order in which applications are received.

Board and room will be provided for the session, July 2nd to July 27th, for fifteen dollars.

Each resident of Macdonald Hall will be expected to provide her own napkin ring, medicine spoon or glass, toilet soap, towels, pillows, pillow covers, sheets, and laundry bag. Each should bring at least:

4 ordinary towels,	1 pillow,
2 bath towels,	2 pillow covers,
4 sheets, at least 60 in. × 90 in.,	1 laundry bag.

Laundry: Towels, sheets, and pillow-cases are laundried free, but all students are responsible for their own personal laundry. The Hall laundry room will be open at certain times each week for the convenience of residents who may wish to wash and iron small things for themselves.

Regulations in Residence: (1) Good health is a requisite for admission. Students showing signs of tubercular or nervous troubles will be asked to retire.

(2) A disposition of cheerfulness and helpfulness is essential. Students who cannot help in promoting this will be asked to seek accommodation elsewhere.

(3) Students are required to make good all breakages or damage of furniture, etc., used by them.

(4) Simple rules regarding conduct in Hall, time of meals, study hours, etc., will be drawn up on consultation with the students when they arrive.

Regulations for the Reorganization of Continuation Classes.

(Circular No. 37.)

Regulations 20 and 21 are hereby rescinded and the following substituted therefor:

Continuation Classes, Grades A, B, and C.

I. *General.*

1.—(1) There shall be three grades of Continuation Classes, A, B, and C, as provided for in Section 8 of The Public Schools Act and as defined in the following regulations:

(2) When a Continuation Class is opened, or when a Class already established is raised to a higher status, the Board of Trustees shall comply with the requirements for such status from the date of its establishment.

2. The yearly apportionment by the Education Department of the Legislative Grant to Continuation Classes shall, in the case of each Class, be the total of the sums apportioned on the different bases set forth below in the case of each grade of Class.

3. When a Continuation Class has been open, or when an additional teacher has been employed, for at least one term but less than a year, only one-half shall be paid, in each case, of the Fixed Grant, and of the Grant on the Teacher's Salary and on the Grade of his Certificate.

4. All sums received by a Board of Trustees from the Legislature and the County as a Continuation Class grant, shall be expended on the salaries and the equipment of the Continuation Class alone; and a financial statement shall be submitted through the Public School Inspector by each Board to the Minister of Education on or before July 15th of each year, in a form to be provided by the Education Department, showing in detail the receipts and expenditures on this account, with such additional particulars as the Minister of Education may require.

5. On or before July 15th of each year, as a condition of the payment of the Legislative Grant, the Inspectors concerned shall certify, in a form to be provided by the Education Department, that, to the best of their knowledge and belief, as the result of their inspection and on the evidence of a certificate or certificates submitted to them by the Principal of the Continuation Class and the Chairman of the School Board, the provisions of the Regulations affecting such Class have been fully complied with.

6. When the Legislative Grant is not sufficient for, or when there is a balance over, the apportionment on the bases provided below for each grade of Class, the Education Department shall make a *pro rata* adjustment of the total in the case of each class.

7.—(1) The equipment for a Continuation Class shall be for the special needs of such class and shall be approved from time to time by the Inspector of Continuation Classes and the Inspector of Public Schools or Separate Schools, as the case may be.

(2) The date at which the minimum equipment of classes now established shall be imperative shall be at the discretion of the Inspector of Continuation Classes and the Inspector of Public Schools or Separate Schools, as the case may be.

(3) From year to year, School Boards shall expend on equipment such sums as may be required on the report of the Inspector of Continuation Classes and the Inspector of Public Schools or Separate Schools, as the case may be; but, in the case of each grade, the total of such sums shall not exceed the maximum prescribed below on which the Legislative Grant is to be computed.

8. Each teacher who is legally qualified under the Regulations of 1904 shall be recognized as legally qualified under the same School Board for the Continuation Class in which he is now teaching.

9. The pupils of all grades of Continuation Classes shall be admitted in accordance with the Regulations governing the admission of High School pupils.

II. *Continuation Classes, Grade A.*

General.

10.—(1) The course of study for Continuation Classes, Grade A, shall be that prescribed for the High Schools, so far as the adequacy of the staff, the equipment, and the accommodations will permit.

(2) The following subjects are obligatory on all pupils: Geography, Arithmetic and Mensuration, English Grammar, Writing, Reading, English Composition, English Literature, History, Art, and Elementary Science. Other subjects of the High School course may be taken as may be agreed upon between the pupil's parent or guardian and the principal of the Class.

11. The pupils of such Classes shall be taught separately from the pupils of the other classes of the Public School, and the organization of the Continuation Class staff shall be subject to the approval of the Inspector of Continuation Classes.

12.—(1) In a Continuation Class of one form, the Principal shall hold at least a permanent First Class certificate.

(2) In a Continuation Class of two forms, the Principal and the assistant shall each hold at least First Class certificates, at least the Principal's being permanent.

(3) In a Continuation Class of three forms, the Principal shall hold the qualifications of a principal of a High School; and each of his staff, the qualifications of an assistant teacher in a High School.

13. The class-room accommodations shall be separate from the Public School, but the building need not be separate.

14. The equipment shall be of the following minimum values:

	One or two teachers.	More than two.
Library	$150.00	$300.00
Scientific apparatus	150.00	300.00
Maps, charts, and globes	25.00	50.00
Drawing models	25.00	50.00

15. Teachers of Continuation Classes, Grade A, shall be granted permanent certificates under the same Regulations as govern the High Schools.

Apportionment of the Legislative Grant.

16. Continuation Classes, Grade A, in Rural Public Schools, shall not share in the General or the Special Grants to such Public Schools, excepting the Township Grant payable under Section 19, 70 (2) and (3) of The Public Schools Amendment Act of 1907.

17. The Legislative Grant to Continuation Classes, Grade A, shall be apportioned on the following bases:

(1) *Fixed Grants.*

(*a*) $100.00 for a class of one form, to which the equivalent of the time of one teacher, but less than the time of two teachers, is given.

(*b*) $200.00 for a class of two forms, to which the time of two teachers, but less than the time of three teachers, is given.

(*c*) $300.00 for a class of three forms, to which the time of three teachers is given.

(2) *On Salaries.*

In the case of (*a*) above, twenty-five per cent. of the excess of the Principal's salary over $400.00.
Maximum Grant, $150.

In the case of (*b*) above, twenty-five per cent. of the excess of the two teachers' salaries over $900.00.
Maximum grant, $250.

In the case of (*c*) above, twenty per cent. of the excess of the three teachers' salaries over $1,500.00.
Maximum Grant, $350.

(3) *On the Value of the Special Equipment.*

Ten per cent. of the approved value, the maximum value recognized being as follows:

(*a*) In the case of Continuation Classes with one or two teachers:
Library, $300; Scientific apparatus, $300; Maps, charts, and globes, $50; Drawing models, $50.

(*b*) In the case of Continuation Classes with three teachers:
Library, $600; Scientific apparatus, $600; Maps, charts, and globes, $75; Drawing models, $75.

(4) *On the Character of the Accommodations.*

The grant on the grading of the accommodations shall be distributed according to the following scheme:

School.	One Teacher.				Two Teachers.				Three Teachers.			
Grade.	I.	II.	III.	IV.	I.	II.	III	IV.	I.	II.	III.	IV.
	$ c.	$ c.	$ c.	$ c	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
Water supply	1 00	75	50	25	1 50	1 15	75	40	2 00	1 50	1 00	00
Class rooms	2 00	1 50	1 00	50	3 00	2 25	1 50	75	4 00	3 00	2 00	1 50
Laboratory	2 00	1 50	1 00	50	3 00	2 25	1 50	75	4 00	3 00	2 00	1 00
Blackboards	1 00	75	50	25	1 50	1 15	75	40	2 00	1 50	1 00	50
Cap rooms	1 00	75	50	25	1 50	1 15	75	40	2 00	1 50	1 00	50
Desks	2 00	1 50	1 00	50	3 00	2 25	1 50	75	4 00	3 00	2 00	1 00
Laboratory tables	2 00	1 50	1 00	50	3 00	2 25	1 50	75	4 00	3 00	2 00	1 00
Lighting	1 00	75	50	25	1 50	1 15	75	40	2 00	1 50	1 00	50
Heating	1 00	75	50	25	1 50	1 15	75	40	2 00	1 50	1 00	50
Ventilation	2 00	1 50	1 00	50	3 00	2 25	1 50	75	4 00	3 00	2 00	1 00
	15 00	11 25	7 50	3 75	22 50	17 00	11 25	5 75	30 00	22 50	15 00	7 50

(5) *On the Grade of the Teacher's Certificate.*

$20 in the case of each Continuation Class, Grade A, teacher whose academic or professional standing is higher than the minimum prescribed, and whose status and competency shall have been attested by the Inspector of Continuation Classes and by the Inspector of Public Schools or Separate Schools, as the case may be.

III. *Continuaton Classes, Grades B and C.*

General.

18.—(1) The course of study for Grades B and C shall be that prescribed for the Fifth Form of the Public Schools, or the Lower School of the High Schools. Higher work may be taken up in a Continuation Class, Grade B, but only with the approval of the Inspector of Continuation Classes, on

the report of the Inspector of Public or Separate Schools, as the case may be, to whom notice of such intention, with the particulars as to the amount of and the provision for such work, shall be sent by the Principal before his class is organized.

(2) The following subjects are obligatory on all pupils: Reading, English Literature, English Grammar, English Composition, History, Geography, Writing, Arithmetic and Mensuration, Art, and Elementary Science. With the concurrence of the Inspector or Inspectors concerned, a Board of Trustees may select such additional subjects of the prescribed course of study as may in its judgment suit the requirements of the locality.

19. In the case of Grade B classes taking up work higher than that of the Fifth Class, the accommodations, the equipment, the organization and the qualifications of the teacher shall have been approved by the Continuation Class Inspector and the Inspector of Public or Separate Schools, as the case may be; and, in the case of Grade C classes and the other Grade B classes, the accommodations, equipment, organization, and the qualifications of the teachers shall have been approved by the Inspector of Public Schools or Separate Schools as the case may be.

Requirements for Grade B.

20. For a Continuation Class, Grade B, the requirements shall be:

(1) An average daily attendance for the year of at least five pupils.

(2) A Public School staff of at least two teachers, the Principal being instruction only to pupils of the Fourth Form and of higher classes. The Principal shall hold at least a permanent Second Class certificate.

(3) The following minimum special equipment:

Library, $100; Scientific apparatus, $100; Drawing models, $25; Maps, charts, globes, $25.

Requirements for Grade C.

21. For a Continuation Class, Grade C, the requirements shall be:

(1) An average daily attendance for the year of at least two pupils.

(2) A teacher with at least a permanent Second Class certificate.

(3) The following minimum special equipment:

Library, $50; Scientific apparatus, $50; Maps, charts, globes, $15; Drawing Models, $15.

Apportionment of the Legislative Grant.

22. Rural Continuation Classes, Grades B and C, shall share in the General Grants to Rural Public Schools.

23. The Legislative Grant to Continuation Classes, Grades B and C, shall be apportioned on the following bases:

Grade B.

On Salaries.

For Rural Schools:

Ten per cent. of the excess of the Principal's salary over $300 in addition to the 40 per cent. from the General Legislative Grant to Rural Public Schools. Maximum Grant, $30.

For Urban Schools:

Thirty per cent. of the excess of the Principal's salary over $400. Maximum Grant, $60.

For Urban and Rural Schools:

Twenty-five per cent. of the excess of the Principal's salary over $600. Maximum Grant, $100.

Grade C.

On Salaries.

For Rural Schools:

Five per cent. of the excess of the teacher's salary over $300 in addition to the 40 per cent. from the General Legislative Grant to Rural Public Schools. Maximum Grant, $15.

For Urban Schools:

Twenty-five per cent. of the excess of the teacher's salary over $400. Maximum Grant, $50.

Grades B and C.

For Urban and Rural Schools:

(1) *On the Value of the Special Equipment.*

Ten per cent. of the approved value, the maximum value recognized being as follows:

Library, $200; Scentific apparatus, $200; Maps, charts, and globes, $25; Drawing models, $25.

(2) *On the Grade of the Teacher's Certificate.*

Ten dollars in the case of each Continuation Class teacher whose academic or professional standing is higher than the minimum prescribed, and whose status and competency shall have been attested by the Inspector of Continuation Classes and by the Inspector of Public Schools or Separate Schools, as the case may be.

Memoranda.

1. As already provided in the Public Schools Act, each County will give at least the equivalent of the Legislative Grant to each County Continuation Class [See The Public Schools Act of 1901, section 8, subsection (6)].

2. As a condition of the payment of the Legislative Grant in 1908, the Board of Trustees of each Continuation Class shall submit through the Public School Inspector, in a form to be provided by the Education Department, a financial statement showing that it has expended on equipment the Special Legislative Grant made for the purpose in 1906; and, on the salary of the teacher and the special equipment of the Continuation Class for the academic year ending June 30th, 1908, an amount not less than the Legislative Grant and the County equivalent thereto, made in 1907.

3. In the case of a Continuation Class in a Rural School, at least the Township Grant for an assistant teacher, as provided for in section 19, 70 (2) and (3) of The Public Schools Amendment Act of 1907, shall be applied to the salary of the teacher, in addition to the expenditure referred to in Regulation 4 above, and Memo. 2 above; so, too, when there are more than one teacher.

4.—(1) Since Continuation Classes, Grades B and C, in Rural Schools will share in the General Grants to Rural Public Schools, as provided in 22 above, the amount of Legislative aid from the Continuation Class Grant to Continuation Classes, Grade A, is proportionately larger under the new scheme.

(2) In the apportionment of the Legislative Grant, Continuation Classes, Grades B and C, in Urban Municipalities have, in the new scheme, been placed in about the same position as those in Rural Municipalities. It should be noted that the General Legislative Grant, per unit of the average attendance, to Rural Public Schools is now more than three times the General Legislative Grant per unit to Urban Public Schools.

5. A teacher who is now qualified for a Continuation Class, Grade A, under Regulation 8 above, but who does not hold the qualifications prescribed under the new scheme, shall remain qualified under the same School Board for the Continuation Class in which he is now teaching; so, too, a teacher of a Grade B Class, for the new Grade B; and a teacher of a Grade C or D for the new Grade C.

6. When, after due advertisement and offering the highest salary it is able to afford, a Board of Trustees is unable to obtain a legally qualified teacher, a temporary certificate, valid for the current half year, may be granted by the Minister of Education, on the report of the Inspectors concerned, to a suitable person on application of said Board through the Public or the Separate School Inspector. (See Regulation 88, of 1904.)

7. The special equipment for the Continuation Class shall be entered under suitable heads in the Catalogue separately from the ordinary equipment, which shall not be included in computing the grant for the Continuation Class. The Catalogue shall be inspected at each visit by the Inspector or Inspectors concerned, and the values of any new equipment compared with those in the invoices. The various items of the equipment shall also be revalued by the Inspectors as often as may be rendered necessary by the condition of said items.

8. The Legislative Grant to the Continuation Classes for 1907 will be made practically on the same terms as in 1906, except that Grades A and B, neither of which shares this year in the General Legislative Grant to Public Schools, will receive a larger proportion of the Continuation Class Grant. (See Memo. 2 above.)

9. In the event of a dispute in regard to a matter which, under the Regulations, is at the discretion, or is subject to the approval, of the Inspectors, the question shall be referred to the Minister of Education, whose decision shall be final. (See The Education Department Act of 1906, section 23, subsection 12.)

10. It is proposed that, after June, 1908, Continuation Classes, Grade A, shall be known as "Continuation Schools," and Continuation Classes, Grades B and C, as Fifth Classes, without, however, any diminution of the Grants to such Fifth Classes.

July, 1907.

Equipment for Agricultural Departments in Ontario High Schools.

(Circular No. 47.)

It is not intended that the equipment listed below is to be supplied immediately, but, in the development of the work, this list may be used as a guide in making purchases to suit local needs.

In many cases the manufacturers will be found willing to put in equipment for demonstration purposes. In other cases, friends of the school will loan or give equipment. In any case expensive apparatus should not be bought before there is a certainty of a necessity for it.

The High School, in most cases, will be supplied already with a considerable part of this equipment. Where Manual Training work is organized, there will probably be no need for any equipment of tools.

Estimate of Cost of Equipment.

General Requirements.

(1) A cabinet, made on some unit system, with drawers or sections suited to holding herbarium mounts, bird skins, geological specimens, mineralogical specimens, fungus diseases, etc., etc.

(2) A large table with drawer and cupboard facilities, suitable for demonstrating experiments. The projecting top should be heavy and finished to withstand water and chemicals. Where water, gas and electricity are available these should be put in.

Agricultural Physics

Drainage Work.

1 Architect's Dumpy Level, for survey work, complete (5017) (Keuffer & Esser, New York)	$35 00
1 Levelling Rod (6252)	12 00
1 Surveyor's Chain, 66 feet (7786 D)	3 20
or	
1 Surveyor's Chain, 100 feet (7786 B)	3 50
1 Home-made Drainage Level (to be made by teacher) (Level, $1.25; Wood, 50c.)	1 75
2 Sets Arrows (7811) ($1 a set)	2 00
	$57 45

Weather Work.

Box, to be made at school (blueprint showing design may be had at the O.A.C.)	$5 00
1 Standard Rain Gauge (330) (Henry J. Green, Brooklyn, N.Y.)	5 25
1 Maximum Thermometer (34) (Negretti & Zambra, Holborn Viaduct, London, England)	5 25
1 Minimum Thermometer (36) (Negretti & Zambra)	5 25
1 Aneroid Barometer (Special 58) (Henry J. Green), to be provided without symbols "stormy," etc., and adjustable ring	12 00
	$32 75

Soil Work.

2 dozen Zinc Tubes, with gauge diaphragm 1 in. from bottom, for determining water capacity of soil, 7½ in. by 1½ in.	$3 50
2 dozen Trays for setting above tubes into, 3½ x 2½ in. x 1½ in. deep	2 00
12 Long Glass Tubes (1 inch in diameter, 4 feet long)	7 80
1 Rack and 1 Tray for above	1 50
12 Zinc Trays, 7 x 7 in. x 1 in. deep, for showing optimum water content for tillage, and spatulas for mixing soils	1 20
	$10 00

Mechanics.

3 Levers, to illustrate principles of levers	$1 50
Set of weights for use with above, to be fitted with hooks for attachment to levers or pulleys; 6 of each, ½ oz., 1 oz., 2 oz., 4 oz., 8 oz., 1 lb., 2 lb., 3 lb., 5 lb. (Eimer & Amend)	7 50

Set of Pulleys, such as used at O.A.C., Guelph (H. A. Clemens Co., Guelph)	$7 50
Model of ordinary pump	75
Model of pressure pump	75
	$18 00

Farm and Garden Work.

Miscellaneous.

1 Small Scales, weighing ½ oz. up to 240 lbs.	$9 00
1 Truck Scale	.....
1 Grain Tester, gallon (W. & J. G. Greey, Toronto)	20 00
1 Set Grain Measures, ½ bushel, 1 peck, 1 gal., 1 qt., 1 pt.	2 50
1 doz. Germinating Boxes, to be made by students, standard size used at O.A.C., suitable for 100 seeds	1 50
1 doz. Zurich Germinators	60
2 doz. Plates for seed testing	1 20
1 Set of Sieves (15) perforated zinc, as per standard at O.A.C.	3 75
1 Air-tight Box, for killing pea-weevils, grain insects, to be made at school	50
1 5-gal. Crock for treating wheat, oats, etc., for smut	50
Collection of grains, vegetables, tree seeds, weed seeds, etc., to be made at the school	.....
1 Dominion Government Seed Collection	2 00
1 Hand Seed Drill (Planet Junior or New Model)	7 00
1 Hand Wheel Hoe (Planet Junior or Iron Age)	7 00
Spades, Digging fork, Hoes (Draw or Dutch), Rakes (flat backed steel), Trowels, Hand weeders, Garden line and reel, Stakes and labels, Mallet	25 00
	$80 55

Farm Carpentry and Blacksmithing.

Farm Metal Work.

1 Grindstone, 24 x 3 in. in iron frame	$28 00
1 Anvil, 100 lbs. (Peter Wright)	11 00
1 Small Portable Forge	8 50
1 Ballpein Hammer, 1½ lbs.	85
1 Ballpein Hammer, 1¼ lbs.	75
1 pair Flat Tongs	70
1 pair Forging Tongs	80
1 pair Belt Tongs	75
1 pair Gad Tongs	65
1 pair Pickup Tongs	70
1 Hot Set	65
1 Cold Set	65
1 Hardy	48
1 Swage, top and bottom; ¼ inch and ½ inch iron	65
1 Set Flatterers, 2 inch square	65
1 Top and Bottom Fuller, ½ inch	65
1 Set Punches, ⅜ inch and ½ inch, round	50
1 Set Punches, ⅜ inch and ½ inch, square	50
1 Set Flat Chisels, ½ in., ¾ in.	80
1 7-inch Beck Iron	1 25
1 Set Cold Chisels (1) flat (1) cape	1 00
1 Adjustable Hack Saw, and set of blades	2 00

1 Small Hand Drill	$8 00
1 Set S. S. Drills for the above, $\frac{1}{6}$, $\frac{3}{16}$, $\frac{1}{4}$, $\frac{3}{8}$, $\frac{1}{2}$, $\frac{5}{8}$ inch	1 00
1 Calipers, outside, 5 inch	55
1 Calipers, inside, 5 inch	55
1 Steel Blacksmith's Square for forge work	85
1 Machinist's Steel Rule	85
1 Rivetting Hammer	50
1 Soldering Iron and Solder	50
1 Set Files, 8 in. half-round bastard, 8 in. half-round smooth, 8 in. flat, 10 in. square bastard, 10 in. flat, 10 in. half-round	85
1 Screw Plate (Diamond No. C)	4 00
1 Pair Cutting Pliers	88
1 Vise, 4-inch jaws	6 25
	$87 26

Farm Carpentry.

Bench and Vise	$10 00
Cutting Tools.—	
Saws:	
Rip Saw	1 40
Keyhole, Compass or Turning Saw	40
Back or Tenon Saw	1 25
Panel	1 00
Metal Saw	35
Total	$4 40
Chisels:	
$\frac{1}{4}$ in. Socket Mortice Chisel	$0 25
$\frac{3}{8}$ in. Socket Mortice Chisel	30
$\frac{5}{8}$ in. Socket Mortice Chisel	35
$\frac{3}{4}$ in. Socket Mortice Chisel	40
$1\frac{1}{4}$ in. Socket Mortice Chisel	55
$\frac{3}{4}$ in. Bevelled-edge Firmer	28
Cold Chisel	5
Total	$2 18
Planes:	
Jack Plane	$1 25
Block or Hand Plane	65
Spokeshave	30
Total	$2 20
Files:	
Saw, triangular or three-cornered file	$0 10
10 in. half-round	30
8 in. Flat or Mill-saw File	15
$\frac{1}{4}$ in. Round or Rat-tail	15
Total	$0 70

Boring Tools:	
$\frac{1}{4}$ in. Augur Bit	$0 15
$\frac{3}{8}$ in. Augur Bit	18
Gimlet Bit	8
Augur Bits, $\frac{1}{4}$ in., $\frac{3}{8}$ in., $\frac{1}{2}$ in., $\frac{9}{16}$ in., $\frac{5}{8}$ in., $\frac{3}{4}$ in., $\frac{7}{8}$ in., 1 in.	2 25
Drill	18
Total	$2 84
Shears:	
Tinman's Shears	$1 00
Cutting Pliers	75
Scissors	75
Total	$2 50
Marking Tools.—	
Tape Measure	$2 25
Land Chain	3 30
Marking Gauge	15
Mortice Gauge	60
Scratch or Marking Awl	15
Compasses	40
Total	$6 85
Testing Tools.—	
Try Square	$0 35
Framing Square	1 25
Bevel	35
Level	75
Total	$2 70
Holding Tools.—	
Iron Bench Vise	$0 45
Ratchet Brace	1 50
Monkey-wrench	45
Small Screw-driver	20
Screw-driver or Turnscrew (large)	30
Screw-driver bit	10
Pliers	75
Total	$3 75
Driving Tools.—	
Hammer (claw)	$0 50
Rivetting Hammer	50
Mallet	35
Nail Set or Punch	15
Saw Set	50
Total	$2 00

Miscellaneous Tools.

Oil-stone	$0 40
Oil can	5
Putty Knife	15
Belt Punch	10
Glass Cutter	35
Sloyd Knife	35
Can-opener	10
Wad Punch	15
Total	$1 65

Summary of Single Bench Tool Kit.

Cutting Tools	$15 05
Marking Tools	6 85
Testing Tools	2 70
Holding Tools	3 75
Driving Tools	2 00
Miscellaneous	1 65
Bench and Vise	10 00
Total	$42 00

Dairy Husbandry.

	Probable cost.
1 Barrel or Box Churn, size to suit herd	$3 50 to $7 00
1 Lever or Roller Worker	2 00 to 5 00
1 Butter Mould, size one to two pounds	45 to 3 00
1 Shipping Box, with icebox in centre and wooden trays	3 00 to 4 50
1 Thermometor (glass)	20 to 50
1 Salt Sieve (hair)	30 to 75
1 Pair Scales, to weigh quarter ounces	3 50 to 5 00
1 Buttermilk Strainer, size two to four quarts, with perforated tin bottom	25 to 50
1 Butter Ladle	20 to 40
1 Cream Pail (tin, with handles on sides and tin stirring spoon)	1 00 to 1 50
Creamer Cans and box for cold water (8 cows)	5 00 to 20 00
1 Cream Separator (10 or more cows)	60 00 to 75 00
1 Brush for cleaning utensils	20 to 30
A Supply of Washing Soda or Borax	.....
A Supply of good Butter Salt, per sack	70 to 1 60
Butter Colour, if thought advisable to use it, per bottle or per gallon	25 and 3 50
Parchment Butter Paper, per 1,000 sheets	1 00
Babcock Milk Tester (8 bottles)	1 00
Lactometer (Quevenne)	1 50
1 Cow Testing Outfit, such as recommended in Bulletin 12, Dominion Department of Agriculture. There is a probability that the schools may be supplied with these free.	

1 Straightspring Scale (Fig. 1), capacity 40 lbs	$1 25	
1 Sample Bottle for each cow (Fig. 3), each	6 to	10
1 Sample Dipper (Fig. 4), each	10	
1 Box for holding Samples (Fig. 5), each	75	
1 Package of 500 Preservative Tablets	75	
	(About) $100 00	

Entomology.

(Much of this equipment can be prepared at school.)

Killing Bottles, Insect Boxes, Insect Nets, Insect Pins, Insect Spreading Boards, Breeding Cage, Insect Labels, Insect Larva Bottles, Cork	$20 00

Poultry Work.

1 Incubator	30 00
1 Brooder	10 00

Models of trap nests, hen houses, etc., to be made by students.

Botany.

1 Compound Microscope, 2 objectives	35 00
Plant Collecting Cans, Magnifying Glasses, Forceps, Razors, Needles, Glass Slides, Cover Glasses, Herbarium Mounts, Labels, Bell Jars, Beakers, etc	25 00

Summary.

General:	
Land—amount to be determined by local conditions (one acre might be ample)	.....
Office fittings	.....
Laboratory tables, etc	100 00
Collection cabinets, to commence with	50 00
Library	
Agricultural Physics:	
Drainage work	57 45
Weather Work	32 75
Soil work	16 00
Mechanics	18 00
Chemistry: Same equipment as used in High Schools.	
Farm and *Garden Work*	80 55
Farm Carpentry and Blacksmithing:	
Miscellaneous	.....
Farm Metal Work	87 26
Farm Carpentry Work	42 00
Poultry	40 00
Dairy Husbandry	100 00
Entomology	20 00
Botany	60 00
	$704 01

July, 1907.

REGULATIONS AND COURSES OF STUDY FOR THE AGRICULTURAL DEPARTMENTS OF THE HIGH SCHOOL AT ESSEX, AND THE COLLEGIATE INSTITUTES AT GALT, COLLINGWOOD, LINDSAY, PERTH, AND MORRISBURG. SESSION OF 1907-1908.

(Circular No. 47½.)

Regulations for Sept., 1907, to July, 1908.

Admission Requirements.

1. Pupils who take the regular two years' Special Course in Agriculture or a partial course therein in a High School, shall be admitted in accordance with the regulations that govern the admission of other High School pupils. For 1907 to 1908, however, other pupils may be admitted who, in the opinion of the Principal of the School and the Public School Inspector, are competent to take up the work. All such pupils shall be regarded as regularly enrolled.

2. To the courses held throughout the county, such persons may be admitted as, in the judgment of the teacher of Agriculture, are competent for the work, whether, for example, farmers or farmers' sons or daughters, or pupils of Public Schools or of other High Schools. A list thereof and their reported attendance shall be kept by the Principal of the school; but they shall not be enrolled as regular High School pupils unless they have been admitted to a High School as provided above.

Qualifications of Teachers.

3. The teacher of Agriculture in a High School shall hold the degree of B.S.A. from the University of Toronto, or a certificate of qualification from the Ontario Agricultural College. Such teachers may also take part in the Science work of the school at the discretion of the Principal, provided such work does not in any way interfere with their special work as teachers of Agriculture.

Duties of Teachers.

4. Like the other members of the High School staff, the teacher of Agriculture shall be generally subject to the authority of the Board and Principal of the High School, the latter of whom shall control his time-table and have the general direction of his movements.

5. With a view to bringing the Department of Agriculture into closer touch with the farming community and of making it more directly beneficial to them, the teacher of Agriculture shall also act as the local agent of the Department of Agriculture for the district, as follows. —

(*a*) He shall visit from time to time the various parts of the county and report upon their special requirements.

(*b*) He shall take charge of an office situated in the High School district, where he may meet the farmers, giving them aid and advice, supplying them with the bulletins of the Department of Agriculture and such other farm literature as may be useful, and discussing with them the latest experimental results of the work of the Ontario Agricultural College.

(*c*) He shall keep in touch with local Agricultural Associations, Farmers' Institutes, etc., and shall act in concert with the staff of lecturers, demonstrators, and professors of the Ontario Agricultural College.

(*d*) Where practicable, he will arrange for excursions for students and others to the Agricultural College in the month of June, and shall take special charge during such visits of those who have been in attendance on his classes.

(*c*) He shall attend the Winter Fair and annual meeting of the Experimental Union, held yearly in Guelph for one week in December.

Accommodations and Equipment.

6. A suitable Laboratory and the Equipment necessary to carry out the work as outlined under Chemistry, Physics, and Biology.

Experimental Grounds, separate from the ordinary School Grounds, for illustration purposes in the growing of various classes of farm crops and training in experimental work. The area of the Grounds will be determined by local conditions; one acre might be sufficient.

A list of suitable equipment from which Boards may select has been prepared and may be obtained on application to the Education Department.

Inspection.

7. The Agricultural Department of each High School or Collegiate Institute shall be inspected at least once each year by an officer of the Ontario Agricultural College deputed for this purpose by the Minister of Education. This officer shall report to both the Department of Education and the Department of Agriculture.

Courses of Study.

8. The regular Special Course in Agriculture in a High School shall be the two years' one, as defined below. Partial courses may also be provided in the High School for regular High School pupils or for such occasional pupils as may desire them.

9. Regular High School pupils taking the special course in Agriculture shall take in addition the subjects which are obligatory upon all High School pupils, namely, Geography, Arithmetic and Mensuration, English Grammar, Writing, Reading, English Composition, English Literature, and History, with such suitable modifications of this course, and with such additional subjects, as may be deemed expedient by the Principal and the parent or guardian of the pupil. [See Reg. 39, (4) and (6), of 1904.]

10. It is not intended that all the work outlined in the course below shall be covered in two years. The outline is suggestive rather than obligatory, and the amount of work to be taken up shall be determined by the needs of the community, and the nature of the special subjects selected. In some districts, Horticultural subjects, for example, will receive special emphasis; in others, Dairying, and, in others again, Stock raising, and so on.

11. In addition to the regular Special High School Course, partial courses shall be provided, when needed, in the High School and in other parts of the county, of such duration and character as may meet the needs of the farming community. These may include short courses in Horticulture; Soils, Seeds, Weeds; Farm dairying, Poultry keeping, etc., as well as demonstrations and lectures in particular subjects (Stock judging, Seed judging, etc.) at one or more meetings at suitable centres. In these courses the teacher of Agriculture will be assisted, when necessary, by members of the staff of the Ontario Agricultural College, and he will be supplied by the College with abundant material for demonstration purposes.

12. High School pupils who take the two years' Special Course herein provided, and whose competency is attested by the Principal of the School and the teacher of Agriculture, shall be eligible for entrance to the Second Year work of the Ontario Agricultural College.

13. The following is the regular two years' Special Course, to be organized in accordance with the requirements of each locality:

(1) *Field Husbandry.*—History of agriculture; different systems of farming; different kinds of soil; rotation of crops; farm crops in their relation to drainage; application of manures; green manuring; preparation of the land for the different crops; methods of cleaning, testing, and selecting farm seeds; study of cereals, roots, fodder crops, grasses, clovers, and other farm crops; sowing, harvesting, preserving, marketing.

Experimental grounds near the school will be used for illustrative experiments with varieties of cereals, grasses, root crops, and in seed selection, methods of cultivation, rotation of crops, and the use of various kinds of fertilizers.

(2) *Animal Husbandry.*—A study of the history and characteristics of the principal breeds of live stock, including light and heavy horses, beef and dairy cattle, sheep, and swine; feeding and management; principles of breeding; registration of pedigrees; market requirements.

Visits to local farms, and practical work in judging stock.

(3) *Dairy Husbandry.*—The herd: formation, care, and management of a dairy herd, rearing of calves; dairy stables: lighting, cleaning and ventilating; individual cow records. The milk: care of milk, elementary chemical and bacteriological study of milk. The home dairy: running of hand separators and care of dairy utensils; manufacture, packing, and marketing of butter.

Visits to local creameries and cheese factories, and a study of factory methods of manufacture, packing, and marketing.

(4) *Poultry.*—The most valuable breeds and varieties of hens, ducks, geese and turkeys, their characteristic points and peculiarities; various methods of housing poultry; incubation, brooding, and rearing of chickens; general methods of feeding and management; market conditions; the fattening and dressing of poultry for home and foreign markets.

(5) *Horticulture.*—Treatment of fruit plantations: cultivation, grafting, spraying; value of cover crops; methods of growing and caring for vegetables; selection of varieties; study of insect and fungus diseases affecting fruits and vegetables; care, storing, and marketing of fruit.

(6) *Forestry.*—Forestry as related to the farm; classification of the common forest trees; the establishment, care, and protection of the woodlot; varieties and methods for roadside planting and shelter belts.

(7) *Agricultural Botany.*—Identification and eradication of weeds and weed seeds; Seed Control Act and its application; experiments to show seed germination and growth of plants; the relation of plants to soil, air, light, temperature, and moisture; systematic study of the structure of cereals, grasses, legumes, and roots; plant diseases: smut, rust, mildew, etc.; how to recognize and combat them; collecting, pressing, and mounting of weeds, grasses; weed seeds for samples in identification.

(8) *Entomology.*—A practical course in economic insects, identification, habits, and life histories; a close study of the more important insects; by means of breeding and rearing cages; insecticides; collecting of injurious and beneficial insects and samples of their work.

(9) *Agricultural Physics.*—Soil: classification and physical examination, origin, and mode of formation; soil forming, soil forming rocks and minerals; behaviour towards moisture. Surveying and drainage: measurement of fields and farms with the chain; calculating areas and drawing plans; use of various instruments for determining levels; preparing plans for drainage; methods of digging, laying of tile, and filling of trench; cal-

culations concerning required size of tile and cost of various systems. Conservation of moisture by drainage, mulching, and cultivation; capillarity and its relation to plant growth. Water capacity of different soils. Mechanics: principles of farm machinery; principles of ventilation, lighting, and heating.

(10) *Agricultural Chemistry.*—Chemical composition of soils; elements used by plants; availability and assimilation of plant food in the soil; application of fertilizers; absorption and retention of important constituents, as nitrogen, phosphoric acid, and potash; insecticides and fungicides; their composition and proper mixture.

August, 1907.

Text-Books Authorized for Use in Public Schools, High Schools, and Training Schools.

(Circular No. 14.)

(*Except for Geometry, where the revised curriculum renders an additional work necessary, no change is made for the Schools from the books authorized in 1904.*)

1. The text-books named in Schedule "A" shall be the authorized text-books for Public Schools. Pupils taking any optional subject in the Public School course may use the text-book authorized in such optional subject. The text-books in French and German are authorized only for schools where the French or German language prevails and where the Trustees, with the approval of the Inspector, require French or German to be taught in addition to English. Text-books marked "optional" shall be introduced into the Public Schools only by resolution of the Board of Trustees. Books authorized in the Lower School of the High School course may be used by pupils taking the corresponding subjects of Continuation Classes.

2. The text-books named in Schedule "B" shall be the only authorized text-books in High Schools and Collegiate Institutes for the course of study prescribed in the Lower and Middle Schools. *Books authorized for use in the Public Schools may be used in the Lower School and it is recommended that so far as the Principal may deem desirable, these books be used for the first year instead of the corresponding High School books. For the second special course or more advanced work in the Commercial department or for Technical courses any books recommended by the Principal may be used, with the approval of the High School Board.*

3. The text-books named in Schedule "C" shall be the authorized text-books for Model Schools. Only such books shall be used by the teachers-in-training as may be ordered by the Principal.

4. Any text-book used in any school before the 1st July, in 1905, and recommended by resolution of the Trustees to be continued in use, shall be deemed as authorized in such school until further notice. The vertical or slanting copy books heretofore authorized, and published by the Rose Printing Company, may be used in any Public School.

5. For religious instruction, either the Sacred Scriptures, or the Scripture Readings adopted by the Education Department, shall be used as prescribed by the Regulations of the Education Department.

6. Early in October next, the contents and prices of the list of books now in use in the schools will be revised and arrangements made for the publication of such text-books as may be required.

7. Owing to the Report of the Text Book Commission having been only recently received and the fact that several Text books on one subject are on the authorized list, the difficulties consequently connected with agreements and copyrights, and the necessity for giving due notice to the trade, the Department has not yet been able to secure what it would consider sufficiently adequate reductions in the prices of the books now authorized for the High Schools and Public Schools, except, as has been announced, in the case of the Ontario Readers.

Public Schools. (Schedule A.)

Ontario Readers:	For the First Reader, Part I	5 cents.
	For the First Reader, Part II	7 cents.
	For the Second Reader	9 cents.
	For the Third Reader	13 cents.
	For the Fourth Reader	15 cents.

The Publisher selling to any purchaser for use in Ontario shall allow the following discounts on the Ontario Readers:—

(*a*) On one or more copies of any book, 25 per cent. off the prescribed retail price.

(*b*) On quantities of the value of $250.00 and upwards at retail prices (the said purchase being made of any quantity of any or all of the said books and in any proportion the purchaser may desire), 25 per cent. off the prescribed retail price, and an extra ten per cent. thereafter.

A Modern Phonic Primer, Part I. (Morang), *or* the Public School Phonic Reader, Part I.	$0 10
Public School Phonic Primer, Part II., *or* A Modern Phonic Primer, Part II. (Morang)	0 15
High School Reader	0 50
Public School Arithmetic	0 25
Public School Algebra and Euclid	0 25
Public School Geography, *or* Morang's Modern Geography.....	0 75
Our Home and its Surroundings (for Junior classes)	0 40
Rose's Public School Geography	0 75
Public School Grammar	0 25
Morang's Modern English Grammar	0 25
Public School History of England and Canada	0 30
History of Dominion of Canada (Fifth Form)	0 50
Duncan's Story of the Canadian People	0 50
Weaver's Canadian History	0 50
Public School Drawing Course, each number	0 05
Public School Physiology and Temperance	0 25
Public School Copy Book	0 07
Practical Speller	0 25
Public School Bookkeeping	0 25
Public School Agriculture	0 30
Public School Domestic Science (optional)	0 50

French-English Readers.

First Reader, Part I,	$0 10
First Reader, Part II.	0 15
Second Reader	0 25
Third Reader	0 36

German-English Readers.

Ahn's First German Book	0 25
Ahn's Second German Book	0 45
Ahn's Third German Book	0 45
Ahn's Fourth German Book	0 50
Ahn's First German Reader	0 50

High School and Collegiate Institutes. (Schedule B.)

English.

High School Reader	0 50
The Principles and Practice of Oral Reading	0 50
High School English Grammar	0 75
High School English Composition	0 50
Elementary English Composition (Sykes)	0 40
High School Composition from Models	0 75

History and Geography.

High School Geography (Chase)	1 00
Morang's Modern Geography	0 75
High School History of England and Canada	0 65
Wrong's "The British Nation"	1 00
Myers' Ancient History—Greece and Rome—Canadian Edition.	0 75
Botsford's Ancient History for Beginners (Morang)	1 00
History of the Dominion of Canada (Clement)	0 50

Mathematics.

High School Arithmetic	0 60
Arithmetic for High Schools (DeLury)	0 60
High School Algebra	0 75
Elements of Algebra (McLellan)	0 75
Elementary Plane Geometry (Baker)	0 50
Geometry for Schools, Theoretical (Baker)	0 75
High School Euclid (J. S. McKay), *or* by A. C. McKay and R. A. Thompson (Books I., II., III., 50 cents)	0 75

Classics.

First Latin Book and Reader	1 00
Primary Latin Book and Reader	1 00
Hagarty's Latin Grammar	1 00
White's First Greek Book	1 25
High School Beginner's Greek Book	1 50

Moderns.

High School French Grammar and Reader	1 00
High School German Grammar and Reader	1 00

Science.

High School Physical Science Part I., 50 cents; Part II	$0 75
High School Botany, Part II	0 60
High School Chemistry	0 50

Bookkeeping and Drawing.

High School Bookkeeping	0 60
Commercial Course in Practical Bookkeeping (Dickinson and Young)	0 40
High School Drawing Course, each number	0 10

Cadet Drill.

High School Cadet Drill Manual (optional)	0 40

County Model Schools. (Schedule C.)

School Management (Millar)	$1 00
Methods in Teaching (Edited by Tilley)	1 50
Public School Physiology and Temperance	0 25
New Psychology (Chapters 4, 5 and 6 omitted) (Gordy)	1 25
Steps in the Phonic System (Cullin and Niven)	0 50
Elementary Phonetics (Burt)	0 35
Elementary Treatise on Arithmetic (Taylor)	0 50
Mental Arithmetic (McLellan and Ames)	0 30
Algebraical Exercises (Barnes)	0 30
Introductory Geometry (McLean)	0 50
A Guide to Nature Study (Crawford)	0 90

August, 1907.

Departmental Instructions.

(Circular No. 57.)

High School Entrance Examination, 1908.

1. The High School Entrance examinations for 1908 will begin on Wednesday, the 24th of June, at 8.45 a.m., and will be conducted under the provisions of Section 41 of the High Schools Act and Sections 23-28 of the Regulations, subject to the instructions herein contained.

2. Candidates who purpose writing at the examination must notify the Public School Inspector before the 1st day of May.

3. A teacher who has pupils writing at the High School Entrance examination, shall not be eligible to act as an Examiner or Presiding Officer where such pupils are writing.

4. When the County Council recommends the holding of an examination at any place other than the High School, the Presiding Officer shall be paid the sum of $3 per diem, and travelling expenses for conducting such examination, and the Examiners shall be allowed the sum of $1 per can-

didate for reading the answer papers. It shall be lawful for the County Treasurer to pay all the expenses of such examination on the certificate of the County Inspector.

Selections for Memorization.

Lead, Kindly Light; A Psalm of Life; Flow Gently Sweet Afton; The Heritage; Elegy Written in a Country Churchyard; The Barefoot Boy; Ye Mariners of England.

The selections for memorization are common to both the Ontario and Catholic Readers.

Duties of Inspector.

5. The Inspector shall notify the Education Department not later than the 3rd day of May in each year of the number of persons desiring to be examined at any High School or other authorized place within his jurisdiction.

6. In any city or town forming a separate inspectoral division, the Inspector or Inspectors of such city or town shall preside at the examinations, and in conjunction with the Board of Examiners for such city or town shall read the papers and report to the Education Department.

7. In counties in which more High Schools than one are situated the Inspector for the county shall elect at which High School he will preside, and shall notify the Education Department of the choice he makes, and in each of the other High Schools the Principal of the High School shall preside.

8. In the case of examinations affiliated with a High School, the Inspector, within whose district such affiliated examinations are held, shall appoint Presiding Officers, who shall be teachers in actual service, notice of which shall be sent to the Education Department; and such Inspector, together with the Examiners of the High School with which the examination is affiliated, shall be the Board of Examiners in all such cases.

9. Where from the number of candidates, or any other cause, additional Presiding Officers are required, the Inspector shall make such appointments as are necessary, preference being given to the other members of the Board of Examiners. The number of candidates in charge of one Presiding Officer at the High School Entrance examinations shall not exceed forty, and under no circumstances shall two candidates be allowed to sit at the same desk.

10. Where more examinations than one are held in an inspectoral division, the papers will be sent by the Education Department to the Inspector or the Presiding Officer, as the case may be.

11. The parcel containing the examination papers, shall not be opened till the morning of the examination day, nor shall any envelope containing the papers in any subject be opened until the time prescribed in the time-table for the examination in such subject.

Duties of Presiding Officers.

12. To be in attendance at the place appointed for the examination at least fifteen minutes before the time fixed for the first subject and to see that the candidates are supplied with the necessary stationery and seated so far apart as to afford reasonable security against copying. (See No. 9 above.)

13. To open the envelope containing the papers in each subject in full view of the candidates, at the time prescribed, and to place one paper on each candidate's desk.

14. To exercise proper vigilance over the candidates to prevent copying, and to allow no candidate to communicate with another, nor permit any person except another Presiding Officer to enter the room during the examination.

15. To see that the candidates promptly cease writing at the proper time, fold and endorse their papers properly, and in every respect comply with the instructions herein contained.

16. To submit the answers of the candidates to the Examiners, according to the instructions from the Board.

Duties of Candidates.

17. Every candidate should be in attendance at least fifteen minutes before the time at which the examination is to begin, and shall occupy the seat allotted by the Presiding Officer. Any candidate desiring to move from his allotted place or to leave the room shall first obtain permission from the Presiding Officer to do so. Any candidate leaving shall not return during the examination in the subject then in hand.

18. Every candidate shall write his answers on one side only of the paper, and number each answer. He shall arrange the sheets numerically, according to the questions, and fold them once crosswise, endorsing them with his name, the name of the subject, and the name of the place at which he is examined. A paper shall not be returned to a candidate after being placed in the hands of the Presiding Officer.

19. Any candidate who is found copying from another or allowing another to copy form him, or who brings into the examination room any book, note or paper having any reference to the subject on which he is writing, shall be required by the Presiding Officer to leave the room, and his paper and the papers of all the guilty parties shall be cancelled.

Duties of Examiners.

20. The papers of the different candidates shall be so distributed that the same Examiner shall read and value the answers in the same subject throughout.

21. Marks are to be deducted for mis-spelt words and for want of neatness as indicated in Regulation 27.

22.—(*a*) The reports of the Examiners are to be sent (by mail) to the Education Department at the earliest possible moment, and not later than July 20th. If the members of the Entrance Board are themselves unable to overtake the work of examining the papers within the time specified they shall appoint qualified teachers (see High Schools Act, Sec. 41 (3)) to assist them so that the returns may not be unduly delayed.

(*b*) The bag which contains the question papers is to be returned to the Department (charges prepaid) *at the same time* as the reports are sent.

(*c*) The answer papers of candidates, unless when specially requested, are not to be forwarded to the Department, but are to be retained by the Inspector until the 1st day of October, *after which no case is to be reconsidered.*

(*d*) The Inspector shall issue a certificate to each candidate who passes the High School Entrance examination.

Time-Table. High School Entrance.

Wednesday, June 24th.

A.M. 8.45— 9.00.....Reading Instructions (Circular 57).
9.00—11.00.....Composition.
11.10—11.55.....Spelling.
P.M. 1.30— 3.30.....Geography.

Thursday, June 25th.

A.M. 9.00—11.30.....Arithmetit.
P.M. 1.30— 4.00.....Written Reading.

Friday, June 26th.

A.M. 9.00—11.00.....English Grammar.
11.10—12.00.....Writing.
P.M.—Oral Reading may be taken either Friday afternoon or at such other hours as are convenient.

August, 1907.

PATRIOTIC PROGRAMMES FOR SEPTEMBER, OCTOBER, NOVEMBER AND DECEMBER, 1907.

Issued by the Imperial Order Daughters of the Empire, with the approval of the Minister of Education for use in Schools on the last Fridays of each month.

September.

British Possessions.

"And Statesmen at her council met
Who knew the seasons when to take
Occasion by the hand, and make
The bounds of freedom wider yet."

1. What were the objects of the Colonial Conference?
2 Give the names of the Premiers present, and which Colonies did they represent.
3. Discuss the benefit to the Empire.

Readings.

The Law and the Constitution - - - - - John Buchan.

October.

Canada.

"From growing commerce loose her latest chain,
And let the fair white winged peacemaker fly
To happy havens under all the sky."

1. What place does Canada hold in the Empire?
2. Give a sketch of her progress during the last decade.
3. What will the new Transcontinental Railways do for Canada?

Reading.

The future of Canada - - - - - - - W. Peterson

November.

His Majesty's Birthday. God Save the King.

West Indies.

"And deep across the boundless East we drove
Where those long swells of breakers sweep
The Nutmeg rocks and isles of clove."

1. Why is King Edward VII. so wisely called the Peacemaker?
2. Name the British Possessions in the West Indies.
3. Discuss their importance on Naval Nations of the Empire.
4. Name the products of the different Islands.

Reading.

The West Indies - - - - - - - Sir A. L. Jones

December.

Her Majesty's Birthday. God Bless our good and gentle Queen.

"Yet love, mere love, is beautiful indeed
And worthy of acceptance."

British Commerce.

"The winds, as at their hour of birth,
Leaning upon the ridged sea,
Breathed low around the rolling earth
With mellow preludes, 'We are free'."

1. Discuss the increase of trade from British ports in the Pacific Ocean.
2. What is the material advantage to Canada of an around the world route?
3. How will the Dominion benefit by the influx of immigration?

Reading.

Our Imperial interests in nearer and further Asia - Valentine Chirol

Admission to County Model Schools for the Session of 1907.

For the present session of the County Model Schools and not thereafter, County Boards may admit pupils who are qualified non-professionally as prescribed in Regulation 59, and who will be eighteen years of age on or before August the 17th, 1908. Certificates of qualification as Public School teachers, shall, however, not be issued to such candidates until they are of the legal age, nor shall a County Board have authority to admit any other candidates than those qualified as above.

September, 1907.

Accommodations and Equipment of Rural Public and Separate Schools in the Organized Counties.

(Circular No. 33.)

Instructions to Inspectors and School Boards.
(Revised September, 1907.)

By section 4, subsection 3, of "An Act to amend the Department of Education Act" of 1907, part of the General Grant voted by the Legislature for the Rural Public and Separate Schools in the Organized Counties and the Districts is divided amongst said schools on "the value of the equipment and the character of the accommodations." In instructions, Nos. 12 and 13, the regulations governing the distribution of this part of the grant are given in detail. This circular, which is a revision of, and which supersedes, Circular 33 of 1906, is now issued for the information of Boards of School Trustees which may contemplate the purchase of additional equipment or the erection of new buildings or the improvement of old ones, as well as for the guidance of Public and Separate School Inspectors in valuing the equipment and grading the accommodations of the Rural Schools in the Organized Counties.

As is shown by the official form of Inspector's Report which was distributed early in the present year and by the table for apportioning the grant, which is printed on page 4 of Instructions No. 12, four grades of accommodations are provided for, the differentiation of the grading according to the character of the accommodations being left to the judgment of the Inspector.

While the details in this circular provide the basis for the Inspector's grading in 1907-1908 and thereafter, he is directed now, as he was in the former edition of this circular, to use his judgment in securing necessary or desirable changes in present accommodations, having due regard to the interests of Education, the capabilities of the present premises, and the financial competency of the Boards. Not all the desirable and practicable improvements can be secured in a short time. In many cases it will take years before the condition of the Schools will become satisfactory, and at first the Inspector should direct his efforts towards securing the changes that are of prime importance. The key to the situation is reasonable persistence, aided by judicious use of the scheme of grants on the character of the accommodations.

As to the equipment: A few modifications have been made in the minimum equipment prescribed in Circular 33, of 1906. In particular, the amount of the expenditure on School libraries therein set forth is no longer obligatory. As announced, however, in Instruction No. 12, p. 6, and No. 13, pp. 4-5, a special grant in aid of libraries over and above the 10 per cent. provided for in the general scheme of Legislative aid, will be distributed each year amongst the Rural Public and Separate Schools of the Districts and Organized Counties, on the same conditions as obtain during the present year. There is no more important part of the School equipment than the Library, and the Inspectors should make every reasonable effort to secure an adequate one in every School section.

As has already been intimated in Circular No. 44, it has been brought to the notice of the Minister that some trustees, through fear of losing the Government grant, have been induced by canvassing agents to purchase equipment in excess of what is required, sometimes at exorbitant prices; or articles of the prescribed equipment which are too costly or are unsuitable in character. Inspectors are, therefore, requested to take from time to time whatever steps they may think necessary to protect the interests of the schools under their supervision, and, if, in any case, an injustice has been done which demands an investigation, to report the facts in full to the Department. As far as possible, Inspectors should also see that no favoritism is shown to any firm furnishing school supplies, but that free and fair competition is allowed to all in order that trustees may have the full benefit thereof as to both the prices and the quality of the articles offered. In this connection attention is called to the general prohibitions contained in section 121, chap. 39, 1 Edw. VII., which apply to all school officials.

It is also expected that Inspectors will use their discretion in allowing, at least for a time, a reasonable valuation for such articles now in use in the schools as may fairly meet the requirements, and in this way prevent unnecessary difficulties in the introduction of the new system of distributing the grants to Rural Schools.

The different items of the equipment (both Equipment No. 1 and Equipment No. 2), with their values, should be entered from time to time in the Catalogue which has been sent to each school for this purpose. The Trustees are required to make proper arrangements for the care of the equipment and to give the Inspector all necessary information regarding their purchases, together with vouchers from the dealers concerned. The Inspector is required to inspect the equipment from time to time, lowering the valuation of such articles as are out of repair and striking off such articles as are missing or are no longer of use. The ten per cent. grant provided for in Instructions Nos. 12 and 13 is to be allowed on all items recognized in Equipment Nos. 1 and 2 below.

As is provided in Instructions No. 12 for the Organized Counties, and for the Districts next year in Instructions No. 13, where the assessment is $30,000 or over, a definite amount of the grant on accommodations and equipment is apportioned to each Inspectorate, to be apportioned by the Inspector amongst his Rural Schools, without respect to township boundaries. With this limitation, variations amongst the standards of the different Inspectors will accordingly result in no injustice, so long as each Inspector maintains the same standard in his valuation of the equipment and his appraisal of the character of the accommodations.

Manifestly, however, it will be prudent for each Inspector to set a high standard from the first, and, at his visits to his schools, to discuss his reports fully with the trustees.

Accommodations.

(1) *School Grounds.*—The school site shall not be less than one acre in area, unless, owing to the smallness of the attendance or to other local conditions, the Inspector finds a smaller area permissible, but in that case the area shall not be less than half an acre. It shall be accessible by good highways and not exposed to disturbing noises or noxious odors; also at a safe distance (not less than 100 yards) from stagnant water. The school grounds shall be properly levelled and drained and provided with suitable walks. For the highest grading the grounds shall be ample for school games and for an ornamental plot in front. They should also be set out with trees and ornamental shrubs, and enclosed by a neat and substantial fence or hedge, with suitable gates. Unless so protected, the school grounds shall not be rated of the highest grade. In order to ensure good drainage and water supply, the soil should, if practicable, be sandy or gravelly, not clayey or peaty. No trees shall be placed so close to the school building as to check the free passage of air and light.

(2) Closets.—The closets for the sexes shall be under separate roofs and placed at least 50 feet from the well and at least 25 feet from the rear of the school building (unless where flushed by an adequate water system), to prevent pollution of the well or of the air of the class-rooms. Each closet-room shall contain a sufficient number of compartments properly lighted and ventilated. The closets shall be lined with glazed brick or similar material; or of wood, painted a suitable color and sanded, with floors of cement, brick, or hardwood, placed at least a foot above the ground. Urinals lined with zinc or galvanized iron, or of slate or smooth cement should be provided for the boys (3 ft. urinal space for each closet seat). For the highest grading there shall be locked compartments for the teachers. Suitable walks shall be laid from the doors of the school building to the closets, so that the closets shall be accessible with comfort at all seasons of the year; and provisions shall be made for keeping the walks free from snow in winter. At the discretion of the Inspector, a high close board fence or a hedge or a wall shall be provided between the boys' and the girls' side, from the closets towards the rear of the lot and towards the school building; and the closets shall be placed at least ten feet distant from each other. The entrance to the closets shall be properly screened at least in front (spruce trees preferred), and the principal shall see that the doors are securely fastened after school hours and are opened before school hours.* The closets shall be cleansed and disinfected monthly if possible, and the urinals shall receive daily attention. Dry earth closets or closets with draw-boxes are to be preferred. Road dust will suit as a deodorizer.†

(3) *Water Supply.*—The water supply shall be pure and adequate. There should be on the premises a well (artesian if at all practicable) of

*The woodshed may be placed at some distance from the school house, or immediately in rear thereof, with or without doors opening into the school room. The doors should be placed, one at each end of the school wall. With a partition down the centre of the woodshed, a covered passage may be provided to the water closets at the rear. To prevent the possibility of the air of the school room being polluted, the closets may be placed about ten feet in rear of the woodshed. If, however, the closets are placed close to the woodshed, the greatest care must be taken to have them regularly cleaned and disinfected and thoroughly ventilated.

†Trustees and Inspectors should consult the pamphlet issued by the Provincial Board of Health, Toronto, entitled "Revised Rules for Checking the Spread of Contagious or Infectious Diseases and Hints on Methods for Dealing with Municipal and House Wastes."

good drinking water, with a neat pump and platform, properly protected against pollution from surface drainage or any other source. If a dug well, it shall be thoroughly pumped and cleaned out at the close of each vacation and at such other times as may be deemed advisable by the Inspector. Graniteware pails with covers, or, for the highest grading, earthenware or graniteware water-tanks with covers, and drinking cups of glass or wood enamelled ware, shall be provided and kept scrupulously clean. Where there is no well, other provision, satisfactory to the Inspector, shall be made for an adequate supply of good water.

(4) *School Building.*—The grading of the school building shall depend upon the character of its site and of its construction. It should be well constructed of brick, stone, or cement, with brick partitions. The building should have a southern or south-eastern exposure and shall be at least thirty feet from the public highway. Its architectural appearance shall also be considered. The entrance shall have a vestibule or covered porch, with doors swinging outwards or either way. In schools with more than one teacher, for the highest grading, there shall be separate entrances and separate means of egress to the closets. Where there are two stories, the second floor shall be soundproofed with mortar, felt, or other suitable material. A school bell and, in schools with more than one story, a fire alarm gong shall be provided. Every school should have, as a recreation room, a basement, at least seven feet high in the clear; ceiled with wood or metal sheeting, to keep the floors above warm (plaster obviously objectionable); and having a pine, hardwood, or (preferable) cement floor. Cordwood shall be well dried before being stored in the basement. Where there is no basement, an adequate woodshed shall be provided, of wood, brick, or other suitable material, with proper doors and locks. The woodshed shall be stained or painted a suitable color. Both a basement and a woodshed, being more sanitary, are greatly to be desired; the former being used as a recreation room in inclement weather especially for the younger pupils, and the latter for the wood and other supplies.

(5) *Class Rooms.*—The class rooms shall be oblong; the length being greater than the breadth, to allow the pupils' seats to be arranged in a square, leaving a clear space with the teacher's desk in front; and the height being about 13 feet. The class room shall also seat comfortably all the pupils. A superficial floor area of at least 16 spuare feet, and a cubic air space of not less than 250 feet, shall be allowed for each pupil, the provision being based on the highest attendance. Hardwood is preferable for the floors and stairways. Any wood of such quality and grain as would suit for an oil or varnish finish will suit for the rest of the woodwork. Wood finish, instead of plaster, may also receive the highest grading. If calcimined or papered, the walls shall be kept free from dust, and renovated when needed. If painted, they shall be washed down and repainted also when needed. Where it is difficult to keep the ceilings in repair, metallic sheeting should be used. Suitable color schemes (the ceilings always being white) should be adopted for the halls and class-rooms. A soft colour —a light greenish or stone grey or a dull blue—suits the class-room walls; while for the halls terra-cotta shades afford a suitable contrast.

In one-teacher schools with halls, cap-rooms, etc., and in large schools, transoms, hinged at the bottom, shall be placed over the class-room doors. The doors shall swing outwards or either way. At least one waste paper

basket shall be provided for each room, and the floors shall be kept in good order. A closet or a cabinet shall be provided for utensils used in school work; also a suitable bookcase, and shelving for lunch baskets or lunch pails. In order to cultivate the pupils' taste by suitable surroundings, the class rooms should be decorated, as soon as practicable, with good pictures and other suitable ornaments.* Durable scrapers and mats shall be placed at the outside doors. In localities where the flies are troublesome wire screens should be provided for the doors and windows.†

(6) *Teachers' Private Rooms.*—There should be a room for the private use of the teacher or the staff, of suitable size and comfortably furnished. In schools with more than one teacher, to be erected hereafter, private rooms should always be provided.

(7) *Halls.*—The entrances, vestibules, and halls shall be roomy and well lighted, and, where there are more entrances than one, they shall be so placed as to admit of separate entrances for the sexes to the cap and class rooms. For the highest grading, in buildings of two stories, there shall be separate stairways for the sexes, easy of access and well guarded. In the hall, also suitable colour schemes and decorations should be provided.

(8) *Cap Rooms.*—For the highest grading, and in all schools with more than one teacher, to be erected hereafter, separate cap-rooms shall be provided for the sexes. The cap-rooms, properly heated and ventilated, shall be convenient to the class-rooms, and should be provided with wash basins and towels and with all the necessary appliances for storing umbrellas and for hanging caps or cloaks. Where there are no cap-rooms or halls, there shall be a supply in the class-rooms of hooks (one for each pupil) for caps, cloaks, etc. Curtains should be strung on rods or wires to conceal such clothing, and there should be a clear space of about a foot between the curtain and the clothing.

(9) *Desks.*—Every school house shall be seated with either double or single desks having noiseless joints, such single desks being preferable and being necessary for the highest grading.‡ The pupils' desks shall be fastened to the floor in rows facing the teacher's desk, with suitable aisles between the rows and with passages at least three feet wide between the outside rows and the walls of the school room. The desks and seats shall be graded in size to suit the age of the pupils, those of the same size being placed in the same row.§ In each school room the outer row on each side

*Early next year a list of suitable pictures, etc., may be obtained on application to the Education Department. The quality of such pictures, etc., is of far greater importance than the number.

†Inspectors and School Boards should consult "School Sanitation and Decoration," by Burrage and Bailey; $1.50; D. C. Heath & Co., New York City; also "Among Country Schools," by O. J. Kern, $1.25, Ginn & Co., New York City. The latter work treats also of School Grounds, School Gardens, the New Agriculture, Consolidation, etc. Numbers of "The School Trustee," published by the Educational Publishing Co., of Toronto, also deal with the foregoing matters.

‡For sanitary reasons and to secure independent work by each pupil, single desks are greatly to be preferred.

§Desks according to the following scale shall be considered as meeting the requirements:

should consist of adjustable seats and desks, to be adapted to pupils below or above the average size to be seated. The pupil, when seated, must be able to place his feet fully and easily on the floor. The number of the desks shall be adequate for the number on the roll.

There shall be a suitable desk and chair in each class room for the use of the teacher, and at least two additional chairs. The teacher's desk shall be provided with drawers or compartments, having lock and key. There should be a table of suitable size (about 2½ feet by 10 feet), around which the younger pupils may assemble to do part of their work. Where Chemistry or Physics is taken up in a higher class, a suitable table shall be provided for the experiments; and, in such schools, this provision shall be necessary for the highest grading. A sloping stand for the gazetteer and the large dictionary shall also be provided; or a shelf under the window nearest the teacher's desk, about 2 feet long by 14 inches broad, fastened to the wall and with a bracket below to sustain it. A suitable desk may be substituted for the shelf.

(10) *Blackboards.*—There shall be a blackboard of good quality, about four feet wide, extending across the room in the rear of the teacher's desk, with its lower edge not more than two and one-half feet above the floor or platform; and there shall be additional blackboard provision on each of the other available sides of the room.* Slate is greatly to be preferred to plaster or wood or hyloplate. There shall be an adequate supply of blackboard brushes and crayons. At the lower edge of each blackboard there shall be a trough, about five inches wide, for holding crayons and brushes. The troughs and brushes shall be regularly cleaned, a damp cloth or eraser being used for the troughs. The cloth or eraser, when dry, should be cleaned

Age of pupils.	Seats.			Desks.			
	Height.		Slope of back.	Length.		Width.	Height next pupil.
	Front.	Rear.		Double.	Single.		
Five to eight years	11 in.	10½ in.	2 in.	36 in.	18 in.	12 in.	22 in.
Eight to ten years	12 "	11½ "	2 "	36 "	18 "	12 "	23 "
Ten to thirteen years	13 "	12½ "	2½ "	36 "	20 "	13 "	24 "
Thirteen to sixteen years	14 "	14½ "	3 "	40 "	22 "	13 "	26 "

*The following directions for making a blackboard may be found useful (*Such blackboards, however, are never satisfactory*):

(*a*) Where a brick wall is built solid, and also in case of frame buildings, the part to be used for the blackboard should be lined with boards, and the laths for holding the plaster nailed firmly on the boards.

(*b*) The plaster for the blackboard should be composed largely of plaster of Paris.

(*c*) Before and after having received the first coat of color it should be thoroughly polished with fine sand paper.

(*d*) The colouring matter should be laid on with a wide, flat varnish brush.

(*e*) The liquid colouring should be made as follows:—Dissolve gum shellac in alcohol, four ounces to the quart; the alcohol should be ninety-five per cent. strong; the dissolving process will require at least twelve hours. Fine emery flour with enough chrome green or lampblack to give colour, should then be added until the mixture has the consistency of thin paint. It may then be applied in long, even strokes, up and down, the liquid being kept constantly stirred.

outside of the school room. Each blackboard trough should have an open woven wire cover on hinges. *Every possible precaution should be taken against dust in the school room.* Where there is a platform* it shall be from five to six inches high and should extend across the room where practicable.

(11) *Lighting.*—For the highest grading† the class room shall be lighted only from the left of the pupils, the lower edge of the windows being above the heads of the pupils when seated (from 4 to 4½ feet from floor). Where there are supplementary windows in the rear the blinds shall be kept down, except on dull days. To admit of an adequate diffusion of light throughout the whole class room, the windows shall be numerous (area, one-sixth of the floor space, where the exposure is good; otherwise a greater area), and of clear (not ground, or painted) glass; narrow, with two or four panes each; and running as close to the ceiling, as close together, and as far to the rear of the class rooms, as practicable. To prevent reflection from the blackboard, the windows should begin about six feet from the front wall of the class room. The windows shall also be provided with blinds of suitable color (light green or grey or greenish grey). The blinds on the left of the pupils should be semi-transparent; other blinds, opaque. On dull days, windows that have already been provided on the right may be made serviceable; but, if the light from the left is adequate, their blinds should be kept down at other times. The blinds shall be provided with cords so as to be readily adjustable to any required height.

(12) *Heating.*—The temperature of the class rooms, halls, cap-rooms, and teachers' private rooms shall be, as nearly as practicable, 67 degrees. A themometer shall be provided for each class room. For first-class grading, steam radiators or hot air furnaces, or jacketed stoves acting with equal efficacy, are necessary. Where stoves are used, they shall be so placed as to prevent discomfort to any pupil; shall be protected by a jacket of tin, zinc, or galvanized iron; and shall be provided with a strong iron poker and shovel, and an iron pail for ashes. The stove-pipes and the chimneys shall be kept free from soot and dust. Both stoves and stove-pipes shall be polished at least three times a year.

(13) *Ventilation.*—Provision shall be made for an adequate supply of pure air at all times. The foul air shall be removed and the pure air supplied so that there shall be a complete change at least three times an hour. The windows of every school building shall be adjusted by weights and pulleys; and, when the outside temperature permits it, they will provide the necessary change of air. At recess they may also be raised from below and lowered from above, according to the outside temperature. In cold weather, the necessary constant ventilation cannot be secured by the windows. Where there is a stove, the pure air shall be admitted directly from the outside through sufficient ducts running under the floor and opening

*Platforms are now seldom used. Instead, a stool 12 in. by 42 in. and 6 in. high is provided for the teacher's use when he needs the upper part of the blackboard. If the top is hinged, the stool may be used to store various articles.

†Light from above is best; but light from the left is the best available, for it throws any shadow off the pupil's book, etc. When, as directed above, the windows are run up to about half a foot from the ceiling, a good deal of the light on the left comes from above. To secure as much of this light as possible the tops of the windows should be square rather than curved. Light from the rear is objectionable, because it is in the teacher's eyes. Cross lights are injurious. Where there are already windows in front of the pupils, it is indispensable that they be closed up: such lighting is most injurious to the eyes.

below the stove. This pure air supply shall be under control by slides to open or close the ducts. Where steam heating or a hot air furnace is used, the pure air shall be admitted directly from the outside, at a height of about four feet from the ground, to the base of the furnace. In the air space of each furnace or within the jacket of each stove there shall be a pan filled daily with water, so as to furnish the warmed air with the necessary moisture. Air *shall not* be taken from the school room or from the basement to supply the furnace, except in the morning before school, after which this source of supply *must* be shut off.

In cold weather, the foul air shall be taken away from near the floor and out through ventilating ducts in the chimney, which ducts should be somewhat larger in the area than the incurrent pure air ducts. In buildings where ventilating ducts have not been provided in the chimneys, two tin, zinc, or galvanized iron pipes of sufficient size to allow air to be changed three times an hour (the ducts being about nine inches by twelve inches) should extend on opposite sides from near the floor, connecting below with the class room and running up through the ceiling beside the chimney, and so placed as to be well heated. When the pipe cannot be so placed, pipes of large diameter (a foot) with revolving cowls on the top of each will prove effective. Openings, with regulating slides, should also be provided in these ducts near the ceiling for use only in warm weather or when the room is overheated. When needed, a cowl should be placed so as to cover properly the chimney and the excurrent foul air ducts. In new buildings a double flue chimney shall be built, the ventilating flue opening into the school room.

Where storm sashes are used on the outside, they shall contain sliding panels or shall be hinged at the top, to allow of the ingress of pure air; or they may be placed on the inside and also hinged at the top. It answers equally well to have double panes of glass about one-half inch apart in the same sash.

Note.—Model plans for Rural School buildings and School grounds are being prepared by the Education Department and will be ready for distribution early next year. On application by Rural School Boards, the Forestry Department of the O.A.C., Guelph, will, in the spring of the year, supply the following seedlings for planting in their school grounds: *Evergreens*: Norway Spruce, White Pine, Scotch Pine, and White Cedar; *Deciduous*: White Ash, Black Locust, Manitoba Maple, Catalpa and Tulip-tree or White Wood.

Equipment No. 1.

Each school shall have at least a globe, not less than eight inches in diameter and properly mounted;* a map of the hemispheres (or a map of the British Empire, showing also the hemispheres); a map of each continent, a map of Canada, a map of Ontario, a map of the county (if a suitable one is published), a map of the British Isles, a numeral frame (or an adequate supply of loose cubes); a good clock for each class room, kept in good condition; a set of mensuration surface forms and geometrical solids; a blackboard set for each class room (a protractor, a triangle, a pair of compasses, two pointers, a graduated straight edge); a pair of scales, with weights, to weigh from half-ounce to at least four pounds; a set for measure

*A twelve-inch globe is much to be preferred.

of capacity (pint, quart, gallon); a set for linear measure inch, foot, yard,* tape line; a set for square and cubic measures, a school library containing an atlas or a gazetteer, a standard dictionary (with English pronounciation), Supplementary Readers (at least one for each pupil of each form), and a suitable reference dictionary for each additional class room.

When owing to the absence of Fourth Classes or of Fifth Classes, some of the above equipment is not necessary, it may be omitted at the discretion of the Inspector.

As soon as practicable, the equipment prescribed above should be provided; but in carrying out this provision, the Inspector is hereby directed to use his discretion, having regard to individual conditions.†

Equipment No. 2.

Besides the above list, the Education Department has issued a catalogue of books suitable for Public School libraries. From this list, or from a list recommended by the Inspector for his Inspectorate and approved by the Minister of Education, additional books may be selected for the School library. (Regulations 117, 118, 121, and 122 of 1904 have been cancelled. See Regulations 115, 116, 119, and 120 of the same year, which are still in force.)

The Education Department has also issued two other lists for Public Schools; Circular No. 6A (a list of scientific apparatus suitable for Fifth Classes), and Circular No. 6B (a list of equipment for Domestic Science, Constructive Work, and School Gardens).

From these lists, Boards should select, on the advice and with the approval of the Inspector, such books and apparatus as may be needed for the work done in the several departments. These lists have already been distributed, but additional ones may be obtained upon application to the Inspector.

The additional equipment may also include such drawing models and such other charts, maps, and globes as may be suitable for the work of the Public School departments. The percentage will also be allowed on the value of pictures, etc., selected from the Departmental list.

Other Regulations Concerning Accommodations.

1. The trustees shall appoint one of themselves or some other suitable person to keep the school house and premises and all fences, water-closets, outhouses, walks, windows, desks, maps, blackboards, and stoves in proper condition. It shall be the duty of the teacher to inspect the premises daily and report to such officer without delay any needed repairs or want of cleanliness. The trustees shall provide for washing the floors at least quarterly (monthly to be greatly preferred), and for renovating during the summer holidays as often as may be needed, the walls and ceiling if papered or plastered, or for washing them if finished in wood or metal sheeting and painted. The trustees shall also employ a caretaker whose duty it shall be to sweep the floors daily (the windows being then open), to dust daily all the furniture, window ledges, etc., with damp dusters (preferably in the

*The graduated straight-edge, if suitable, may be used instead.

†In order to assist boards in providing suitable equipment, a special Legislative Grant of $60,000, with a county equivalent in the case of each school, was distributed in 1906; and the increased grants of the present scheme of distribution will supply additional funds.

morning at least an hour before school); to make fires, at least one hour before the opening of school, at such times as the teacher may direct. The duties of the caretaker shall be performed satisfactorily to the Principal and to the Inspector, who, in his grading, will take into account the condition of the accommodations at the time of his visit.

2. No Public School house or School grounds, unless otherwise provided for in the conveyance to the trustees, shall be used for any other than Public School purposes without the consent of the trustees, and no advertisements shall be posted in any school room or distributed to the pupils unless approved in the same way.

At the recent session of the Legislature, school trustees were also given the power "to permit the school house and premises to be used for any educational or other lawful purpose which in their discretion they think proper, provided that the proper conduct of the school is not interferred with."

3. All new school sites and all additions to old ones and all plans of new schools or of additions to old ones, and all other proposed school accommodations, shall be first approved by the Inspector of Public or Separate Schools (as the case may be), who shall be guided by the instructions contained herein.

School Flags.

At the recent Session of the Legislature, the sum of $5,000.00 was voted as a first grant towards providing with the Union Jack every rural school house in Ontario. The flags are now being prepared, and, as soon as practicable one will be supplied to each rural school board on application to the Education Department. If, however, a board has already purchased a flag, the cost thereof, when not greater than that of the flag now offered, will be paid by the Education Department on presentation by the board of the receipted bill. The board, itself, however, is expected to supply the flag-pole either in the school yard or over the school house.

Except when flown on public holidays, or on other occasions by direction of the school board, the flag shall be displayed on the wall of the school-room, or when there are more than one school-room, on the wall of that one in which all the pupils assemble; and, as occasion may offer, its history and significance shall be suitably explained to the pupils by the teacher.

*Elementary Agriculture and Horticulture.**

1. Any rural school board, or any school board in a village, that provides and maintains a School Garden with the accommodations and equipment prescribed below shall be entitled to an initial grant not exceeding one hundred dollars, and a subsequent annual grant of twenty dollars out of any grant made for Elementary Agriculture and Horticulture by the Legislature, to be expended in caring for such School Gardens and for keeping the school grounds in proper condition.

*In 1906, $2,000 was voted for Elementary Agriculture and Horticulture, but only $124.50 of this sum was spent. This year also the same sum has been voted. An explanatory circular on this subject will be issued in September. Teachers intending to qualify as teachers of Elementary Agriculture and Horticulture under the above regulations should address the Ontario Agricultural College, Guelph, for particulars. Teachers who have already taken Nature Study courses at Guelph will have their work accepted in part for the certificate.

2.—(1) The area of the School Garden shall be sufficient for the numbe: of plots required, and shall be at least one quarter of an acre in addition to the requirements as to area of the regular school grounds in each case prescribed by the Education Department. The School Garden shall be adjacent or convenient to the regular school grounds.

(2) The school board shall provide the necessary tools, implements, seeds, and other requisites, and also a garden shed, or a suitable apartment, for the storage thereof and for use as a working laboratory.

3. One legally qualified teacher in each school, who holds a certificate from the Macdonald School at Guelph, or any other institution appr ved by the Minister of Education, that he is competent to give instruction in Elementary Agriculture and Horticulture, and who shall thereafter give instruction, approved by the Inspector, in said subjects at any Rural or Village Public School having a School Garden attached, in accordance with the Regulations of the Education Department from time to time, shall be entitled to receive an allowance at the rate of thirty dollars a year from any sum voted by the Legislature for these subjects.

4.—(1) Should the sum voted by the Legislature not be sufficient to pay in full the grants on the foregoing bases, the Education Department will make a *pro rata* distribution of the sum voted.

(2) The grants will be payable on the certificate of the Inspector that the school board and the teacher have complied with the conditions prescribed above.

(Regulations 123 to 131, of 1904, are hereby rescinded.)

September, 1907.

Elementary Agriculture and Horticulture and School Gardens in Village and Rural Schools.—Explanatory and Descriptive Circular.

(Circular No. 13.)

(From the amended Regulations of 1907.)

1. Any Rural School Board, or any School Board in a village, that provides and maintains a School Garden with the accommodations and equipment prescribed below shall be entitled to an initial grant not exceeding one hundred dollars, and a subsequent annual grant of twenty dollars out of any grant made for Elementary Agriculture and Horticulture by the Legislature, to be expended in caring for such School Gardens and for keeping the school grounds in proper condition.

2.—(1) The area of the School Garden shall be sufficient for the number of plots required, and shall be at least one-quarter of an acre in addition to the requirements as to area of the regular school grounds in each case prescribed by the Education Department. The School Garden shall be adjacent or convenient to the regular school grounds.

(2) The School Board shall provide the necessary tools, implements, seeds, and other requisites, and also a garden shed, or a suitable apartment, for the storage thereof and for use as a working laboratory.

3. One legally qualified teacher in each school who holds a certificate from the Macdonald School at Guelph or any other institution approved by the Minister of Education, that he is competent to give instruction in Elementary Agriculture and Horticulture, and who shall thereafter give instruction, approved by the Inspector, in said subject at any Rural or Village Public School having a School Garden attached, in accordance with the Regulations of the Education Department from time to time, shall be entitled to receive an allowance at the rate of thirty dollars a year from any sum voted by the Legislature for these subjects.

4.—(1) Should the sum voted by the Legislature not be sufficient to pay in full the grants on the foregoing bases, the Education Department will make a *pro rata* distribution of the sum voted.

Teachers intending to qualify as teachers of Elementary Agriculture and Horticulture under the above regulations should address the Ontario Agricultural College, Guelph, for particulars. Teachers who have already taken Nature Study courses at Guelph will have their work accepted in part.

School Boards desiring to start a forestry plot in their School Gardens may obtain a free supply of seedling trees on application to the Forestry Department, Ontario Agricultural College, Guelph. These seedlings include Norway Spruce, White Pine, Scotch Pine, White Cedar, White Ash, Black Locust, Manitoba Maple, Catalpa and Tulip Tree, or White Wood. In addition to these the seeds of the more important trees of the locality should also be planted, including, if practicable, Oak, Pine, Maple, Birch, Hickory, Butternut, Walnut, Chestnut, Basswood, etc.

School Gardens.

I. *General Aims.*

To stimulate interest in rural life;

To provide healthful exercise for body and mind, and to afford to the pupil an opportunity to direct his activities along useful lines;

To develop at an early age habits of industry, respect for labour, and a love for productive and constructive work;

To impart useful information in agricultural subjects;

To give facility in the handling of tools and in the practice of garden craft;

To promote the desire to improve home surroundings and to train boys and girls to do such work with efficiency;

To promote the qualities that make for good citizenship, such as the responsibility of ownership, respect for public property, consideration for the rights of others and the principle of co-operation in seeking the common good;

To encourage careful observation of nature; thus enabling the pupil to understand his environment and to appreciate more fully the beautiful in nature;

To promote a spirit of independent investigation in other branches of study;

To bring the life and interests of the school more closely into touch with the home life of the pupils.

II. *Organization.*

Location of the Garden.—So as to be easily accessible, the garden should be convenient to the school room. If possible, it should be situated in a part of the grounds that can be seen from the windows of the Princi-

pal's class-room. The safety of the garden as well as the convenience of the pupils should be kept in mind. Accordingly, the garden should not in any way interfere with the usual outdoor games. Accordingly, also, either a strong hedge or a woven-wire fence should divide the garden from the playground. If the garden has a southern exposure so much the better; if not, protection from storms and cold north winds may be secured by planting along the north and the west sides a wind-break of evergreens. Such planting should not be allowed to shut out a fine view from the school building; but in some cases, it might be used to advantage to shut out unsightly or objectionable features outside the grounds. When practicable, the garden should be placed where it can be seen from the street or highway. It should be in harmony with the natural features of the grounds; or, in other words, it should occupy that place in the grounds where it will "look best."

Size of the Garden.—No school is too small to have a garden of some kind. The area of the garden does not determine its success. The best garden is the one the teachers and pupils have been most deeply interested in making.

The area of the garden will depend largely upon the area of the available grounds and upon the number of pupils taking part in the work. In a large graded school where the size of the garden is limited it may be arranged that gardening be taken up in certain grades only. The area will also be determined in part by the nature of the work carried on. Individual plots of flowers or vegetables require least space and are the all important feature. Larger class plots may be added for the growing of vegetables or grains that cannot conveniently be cultivated in small plots; and, if the garden is large enough, experimental plots in connection with farm crops, as well as forestry and fruit plantations, may be included.

A school ground one and one-half acres in extent might be divided up as follows: Boys' playground, $\frac{1}{2}$ ac.; girls' playground, $\frac{3}{8}$ ac.; front lawn, approaches, etc., $\frac{1}{8}$ ac.; pupils' plots in vegetables and flowers, $\frac{1}{4}$ ac.; field experiments, fruit and forestry plantations, $\frac{1}{4}$ ac.

Size of Plots and Paths.—The size of school garden plots will depend very largely upon the character of the work carried on and the age or ability of the pupils. For pupils in primary classes plots 3 ft. × 5 ft. are very satisfactory; for intermediate classes 3 ft. × 10 ft.; and for seniors 3 ft. × 20 ft. (or 6 ft. × 10 ft.). It will be noticed that the above plots have one dimension in common, viz., 3 ft. wide—this provision becomes more important as the plots are increased in number. If they are of the above size, each pupil should manage two, one for flowers and the other for vegetables; and the flower section of the garden may be separate from the vegetable section. For pupils in the primary class one plot may be considered sufficient, and in this case, both flowers and vegetables might be grown side by side. Class plots should not be smaller than 20 ft. × 20 ft., and plots for field experiments with potatoes, roots, grains, fodder crops, etc., might be 1 rod square or 1 rod × 2 rods, or 10 ft. 5 in. × 20 ft. 10 in. (1-200 of an acre). A walk at least 4 ft. wide should run all around the garden. Paths 3ft. wide should run between class or experimental plots and between rows of individual plots. Narrow paths ($1\frac{1}{2}$ ft. wide) should separate individual plots in the same row. When once the paths and plots have been made and the corner stakes driven, they should not again be disarranged. The plots should be spaded in the fall, no horses being needed in cultivating the garden after the first year.

Garden Plans.—When the extent of the space available for the garden has been ascertained it is advisable to prepare a plan of the garden on paper

which will show the exact size and location of the plots required. Such plans should be made with deliberation early in the spring before planting operations begin, and the pupils should be allowed to co-operate in the work. In addition to this general garden plan each pupil should make a plan of his or her own plot or plots, showing where the different varieties of plants chosen are to be grown. This exercise may form a suitable introduction to map drawing. Each pupil should have a garden note-book in which to record work done and observations made day by day. Such garden diary should contain a plan of the pupils plots drawn to a scale and showing the arrangement of the plants in each plot.

Laying Out the Garden.—The chief requisites for laying out the garden are a tape-line, a long garden line, a supply of small stakes 1 inch square and 1 ft. long, and a hatchet or mallet to drive them down. The stakes for the large plots might be larger than these, and might be made by the boys at home or in the school work-room, if the school is fortunate enough to have such a room. The outside corners or main boundaries of the garden should first be located and marked with strong stakes. The outside walks should then be staked off, space for a border of flowering perennials measured off, and then the individual plots, class and experimental plots, etc., in the order mentioned, the stakes being driven at the points which are to be the corners of the plots.

Preparing the Plots.—The planning and staking out of the garden will, of course, be done by the teacher and the pupils. The making of the paths and the preparation of plots in a large garden, however, will usually necessitate the services of a competent man. Most of the boys and many of the larger girls will prepare their own plots with ease and despatch when they have once been shown how to do the work. The smaller boys and girls will need some assistance. In an ordinary garden the older boys may help the girls, and the smaller boys and hired help will not be needed. The plots should be made the exact size indicated by the four corner stakes. Level cultivation should be followed if the soil is very sandy. Otherwise it is desirable to raise the plots by removing a couple of inches of soil from the paths and placing it evenly upon the plots, which should be made of uniform height, raked level and all edges carefully trimmed with the rake and garden lines. If some well rotted manure is spaded into the plot before raking down, so much the better. Refuse in the form of hard lumps of earth, etc., should be raked out of the paths and removed in a wheelbarrow or used to fill up holes in the garden. In this as in all parts of the work the teacher should insist on care and accuracy. Nothing but the best efforts of the pupils should be accepted in the making, planting, and care of garden plots.

III. *Details of Work.*

Notes on Planting.—Teachers with limited experience in gardening will find some difficulty at first in making a selection from seed catalogues for the school garden. To allow the pupils as much freedom as possible in choosing their own plants and at the same time safeguard them from possible failure and consequent disappointment may become one of the most difficult school garden problems. A few general rules and suggestions will prove helpful.* Beginners should choose the more familar plants, especially

*A circular containing lists of tools and seeds for school gardens may be had on application to the Education Department.

those that do not require more than ordinary treatment. Young pupils should plant seeds that are easily handled, quick to germinate and sure to grow under ordinary conditions. These seeds the teacher should select. Pupils should not attempt to grow too many varieties in one season. Primary classes might try two varieties of flowers and two of vegetables, intermediate classes three or four varieties of each, and seniors up to six of each. A pupil might be allowed to cultivate only one variety if he so wished, but the tendency is to err in the other direction. After the first year the pupils should be encouraged to try at least one new variety of flower or vegetable each year and thereby gain a wide and practical knowledge of varieties. They might, however, be allowed to cultivate the same varieties year after year if they so desired. The older pupils should choose part of their varieties from the list of plants that require to be started early in hot-beds or window-boxes, so that they may become familar with the work of transplanting.

Plants that grow very tall (corn, sunflowers, etc.) should not be put in small individual plots, as they tend to interfere with the light supply to low-growing plants near them. Vines also (squash, cucumbers, etc.) should be grown only in large plots, as they obstruct the paths and interfere with plants in neighboring plots. Different varieties of corn should not be planted side by side, as the wind will carry the pollen of one variety to the pistils of the other if planted near together, and mixed varieties will result. When planting in rows, the rows should run north and south, as the plants will get most sunlight evenly distributed when so planted. If the rows are short and must run east and west, the tall-growing plants should be planted at the north side of the plot.

Colour schemes in planting should be encouraged amongst older and more experienced pupils. Flower designs also afford scope for the imagination and tend to encourage originality. Only low-growing plants of fairly compact habit should be chosen for flower designs or border work. Mass effects which result from growing only one variety of flower in a plot, add to the attractiveness of the garden. Some flowers, like the poppy, verbena, portulacca, or petunia, make a fine display when so grown. Every school garden should have a visitors' plot of fine flowers from which interested visitors would feel at liberty to "take one." The picking of flowers or vegetables from plots by persons other than the owners of those plots should be strictly prohibited.

Flowering perennials should be planted in borders along the front and sides of the garden, along walks, fences, etc., and late-flowering annuals may be transplanted into the perrennial borders to provide bloom late in the season. Perennials, started from seed in August protected throughout the winter by a light covering of leaves or straw, and transplanted to permanent positions in spring, will bloom that same year. Ornamental shrubs should be planted along the sides and in the corners of the grounds—never in the garden nor out in the open grounds where they would interfere with the playing of outdoor games. The same may be said of shade trees. Each pupil should know what he is to plant before planting day comes, and should submit a plan for his plot for the teacher's approval or for rearrangement. To avoid confusion in the garden, not more than a dozen pupils should be engaged in planting at one time. If the flower or vegetable seeds are to be put in in rows, the rows should be kept in perfect line across the garden and if possible be a uniform distance apart. A garden line and a rule are needed for this purpose. A twelve-inch board about 6 ft. long will be found very useful in planting. It can be used as a straight-edge in making the drill

for the seed, is convenient to stand on when sowing the seed, and, lastly, for firming the soil over the seeds when planted. It is very convenient to have the rake-handles marked off in feet and inches.

When the plots are ready and the drills made for the seed the teacher should place in the left hand of each pupil just enough seed to plant the row, giving at the same time a word of instruction as to how thick the seeds should be planted and how much earth should be put over them. Care should be exercised to prevent needless waste of seed. The seed should be taken between the thumb and index finger of the right hand and spread thinly and evenly along. The finer and weaker the seeds the less covering they should have. If the soil is very dry it should be thoroughly watered the day before the planting is to be done. This is a much better practice than to sow seeds, and especially fine seeds, in a dry seed bed and then to water with the sprinkling can. The latter practice invariably causes a hard crust to form over the top, through which the young plants come up with difficulty, if at all; free access of air is prevented and the moisture necessary for growth is allowed to escape.

From one to three weeks after the seeds have been planted and when danger of frost is past, the transplanting from hot-beds or cold-frames may be done. If possible it should be done on a moist or cloudy day, otherwise it will be necessary to shade the plants with papers or shingles for a few days and to water them frequently. Water from a well should be allowed to stand in a tank or barrel for a few hours before being used on garden plants. The holes for the plants may be made with a transplanting trowel, or, if the plants are very small, with a sharpened stick. Before the plants are lifted they should be thoroughly watered to prevent the breaking of the delicate rootlets. They should be placed in the holes, using water if the soil is very dry, and the earth then firmly pressed around their roots. When set, they should be slightly deeper in the soil than before transplanting.

Care of the Garden after Planting.—When once the planting is done, two half-hours' work per week is sufficient to keep the garden in good condition. The prevention rather than the eradication of weeds should be aimed at. If cultivation is carried on regularly and systematically from the first, the weeds will all be destroyed in the germinating stage and will give no further trouble. Mere weed killing is not the greatest value to be gained by cultivation, however; for if the soil is thoroughly stirred around the roots of the plants a couple of times every week, the necessary supply of air in the soil for rapid growth will be ensured. In many cases the top soil forms into a hard crust, especially after a heavy rainfall, and in this hard soil are many little channels through which moisture escapes into the air by evaporation. This soil should be finely pulverized to a depth of two or three inches, thus forming an earth mulch which prevents the rapid escape of moisture from the soil. If mulching and cultivation are thus carefully attended to, the difficult problems connected with the weeding and watering of a garden are incidently solved. The garden rake should supersede the sprinkling can under ordinary circumstances. Of course it is necessary to water plants after transplanting, and there are certain soils that need watering occasionally during a dry season, but such cases are not common. If artificial watering is needed it should be done in the evening and a plentiful supply should be given. Merely wetting the surface soil encourages shallow rooting and is injurious to the plants.

Care should be taken not to have the plants much crowded in the rows or the rows very close together. The ideal condition would be to have the

plants so far apart that they would completely cover the ground without crowding when full grown. When the plants have reached this stage of development, if cultivation has been thoroughly and carefully done there will be no further danger from weeds, as weeds will not grow in such deep shade.

The detection and the treatment of garden pests is a mattter of increasing importance to all gardeners, but it is especially important in connection with school gardening. Nature study with insects can be carried on to greatest advantage in a school garden. An insect at work in its own natural environment is immensely more interesting to the child and is of far greater importance from the Nature study point of view than an insect impaled upon a pin in a glass-covered box. The life history of some of the common garden insects can be studied, their feeding habits noted, and suitable insecticides used on the injurious ones. Fungus diseases of plants such as the potato blight and the tomato rot should also be studied and the pupils made familiar with the nature and use of such fungicides as Bordeaux mixture.

The blooming period of flowers can be prolonged by keeping the flowers closely picked. Seed should never be allowed to ripen unless wanted for subsequent planting, in which case only that from the finest blooms should be preserved. Such selection of seed can best be done by tying strings or labels around the flower stems before the bloom is gone.

Constant care should be exercised in keeping the garden tools in their allotted places. They should never be left out in the garden. All garden refuse, such as weeds, dead plants, etc., should be kept out of the paths and placed in a refuse or compost heap in the least conspicuous place in the garden. When decomposed it produces a valuable humus for potting plants or for use in flower borders. Early in October the plots should all be cleaned off, spaded, and left in readiness for planting operations the following spring.

The produce from the individual plots should become the property of the respective owners and should be removed by them. The produce from each class plot should be divided amongst the members of the class interested, and that from general experimental plots might be sold by the pupils, the salesman in each case to get a commission of say 10 per cent. on his sales, and the balance to be placed in a general garden fund and used to defray expenses or to purchase tools, pictures, apparatus, etc.

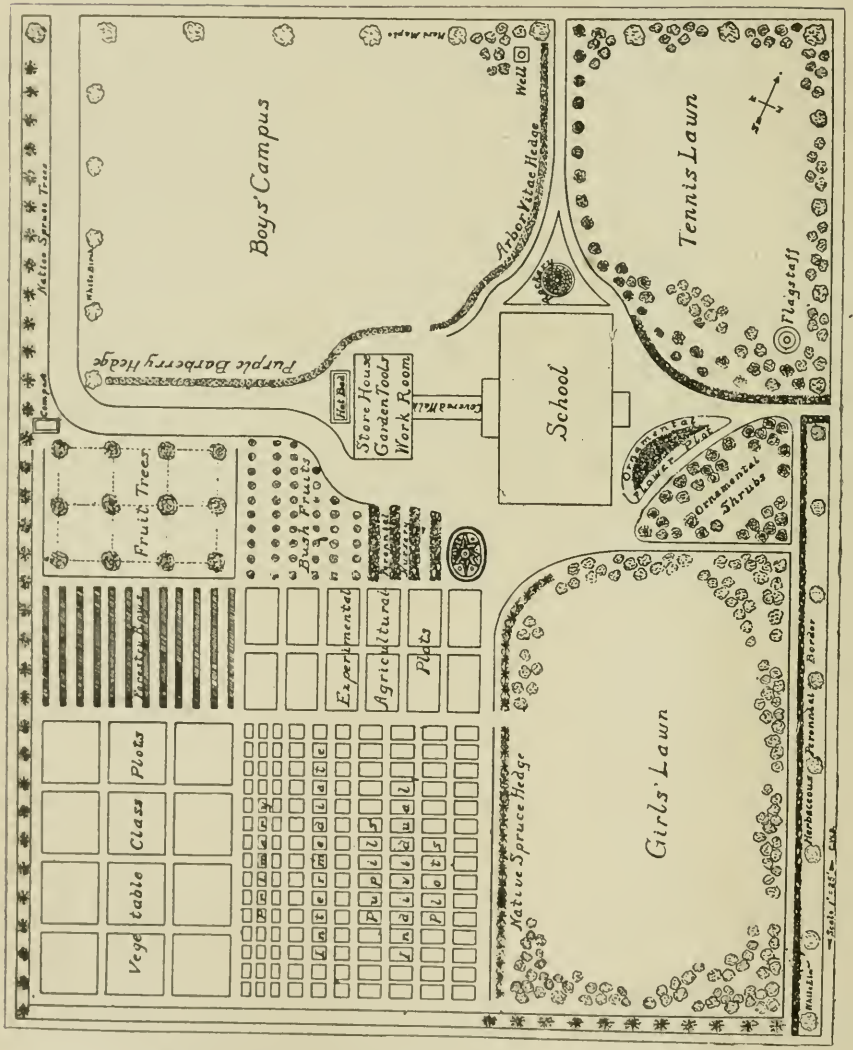
The pupils should be encouraged to give liberally of their flowers to churches and charitable institutions, and every sick-room in the community should be brightened continually by flower bouquets from the school garden. The surplus of plants or the seeds of good varieties should be distributed amongst the people of the section.

Care During Summer Holidays.—Much depends upon how the work has been done before the holidays begin. If all of the above suggestions regarding cultivation and care are faithfully carried out, when the summer holidays arrive the weeds will have been pretty well conquered for the season and the garden plants well advanced. If, however, the best results are to be obtained some attention is necessary during the summer holidays and the pupils should be given to understand at the beginning of the season that they alone are responsible for the care of the plots which have been assigned them. It should be understood also that they will visit their plots once every week during the holidays, or, if absent, they will make arrangements with other pupils to do so. If the work has been conducted in such a way that the interest has been keen throughout the term, the

pupils will cheerfully give their plots this necessary care. If the teacher is a resident in the section, he will be able to meet the pupils at the garden occasionally after school closes in June. In the case of large gardens it may be found necessary to arrange with one or two of the older boys or with some suitable man to do extra work in the garden, the cost to be paid by the School Board from such funds as may be available for garden purposes. General care of the garden rather than care of individual plots should be provided for in this way.

Co-relation.—The extent to which school garden work may be co-related with the ordinary school studies depends largely on the resourcefulness of the teacher. He should take advantage of the garden and of the garden exercises in adding freshness and in giving a practical bearing to subjects which are intrinsically uninteresting to children. Garden work and garden observations afford interesting subject matter for exercises in drawing and composition—interesting because so closely associated with the pupils' own experiences and life interests. Many of our foremost authors and nature poets have idealized the plants of the garden as well as those of the wildwood, so that children's gardening experiences and their own first hand knowledge of plant and animal life, may serve to bring them into a fuller enjoyment of the literature of nature. Many practical problems in arithmetic are suggested, and even demanded, in connection with school gardening. The keeping of garden accounts, for example, may be made a valuable training in bookkeeping and in commercial arithmetic. Weights, measures, values and mensuration are all more or less involved in school gardening. For more advanced classes the study of botany with garden plants and of zoology with garden insects, etc., can be carried on to very great advantage.

September, 1907.



PLAN OF SCHOOL GARDEN AND GROUNDS, CARP, ONT.

Examinations, 1908. Prescribed Texts.

(Circular No. 58).

Entrance Examination.

Selections for Memorization.

Lead, Kindly Light; A Psalm of Life; Flow Gently Sweet Afton; The Heritage; Elegy Written in a Country Churchyard; The Barefoot Boy; Ye Mariners of England.

The selections for memorization are common to both the Ontario and Catholic Readers.

District Certificate.

Tennyson, The Poet, The Lady of Shalott, Oenone, The Epic and Morte d'Arthur, St. Agnes' Eve, The Voyage, "Break, break, break," In the Valley of the Cauteretz; Browning, My, Last Duchess, "How they brought the good news from Ghent to Aix," Love among the Ruins, Home Thoughts from Abroad, Up at a Villa, Andrea del Sarto, The Guardian Angel, Prospice, An Epistle of Karshish, Cavalier Tunes.

Junior Teachers.

English: Tennyson, The Poet, The Lady of Shalott, Oenone, The Epic and Morte d'Arthur, St. Agnes' Eve, The Voyage, "Break, break, break," In the Valley of the Cauteretz; Browning, My Last Duchess, "How they brought the good news from Ghent to Aix," Love among the Ruins, Home Thoughts from Abroad, Up at a Villa, Andrea del Sarto, The Guardian Angel, Prospice, An Epistle of Karshish, Cavalier Tunes; Shakespeare, Macbeth.

Latin: Translation at sight of passages of average difficulty from Caesar, upon which special stress will be laid.

Translation from a prescribed portion of Virgil's Æneid, with questions thereon.

Questions on Latin accidence.

Translation into Latin of English sentences to illustrate the common rules of Latin syntax, upon which special stress will be laid. The vocabulary will be taken from the prescribed portion of Caesar.

Examination upon a short prescribed portion of Caesar, to test the candidate's knowledge of Latin syntax and his power of idiomatic translation.

The following are the texts prescribed:—

Cæsar, Bellum Gallicum, Book IV., Chaps. 20-38, and Book V., Chaps. 1-23; Virgil, Æneid, Book II., vv. 1-505.

Two papers will be set: (1) Translation at sight, Virgil, and accidence. (2) Translation into Latin, syntax and idiomatic translation from prescribed Cæsar, etc.

Senior Teachers.

English: Tennyson, The Poet, The Lady of Shalott, Oenone, The Epic and Morte d'Arthur, St. Agnes' Eve, The Voyage, "Break, break, break," In the Valley of the Cauteretz; Browning, My Last Duchess, "How they brought the good news from Ghent to Aix," Love among the Ruins, Home Thoughts from Abroad, Up at a Villa, Andrea del Sarto, The Guardian Angel, Prospice, An Epistle of Karshish, Cavalier Tunes; Shakespeare, Macbeth, As You Like It.

Latin: Virgil, Æneid, Book II.; Horace, Odes, Books III., IV., Cicero, In Catilinam I., III., IV.

Greek: Herodotus, Tales, ed. Farnell I.-XI. incl.; Homer, Odyssey, XXIII.; Lucian, Timon; Lysias, Pro Mantitheo and de Invalido.

French: Lamennais, Paroles d'un croyant, Chaps. VII. and XVII.; Perrault, le Maître Chat ou le Chat botté; Dumas, Un nez gelé, and la Pipe de Jean Bart; Alphonse Daudet, la Darnière Classe, and la Chèvre de M. Seguin; Legouvé, la Patte de dindon; Pouvillion, Hortibus; Loti, Chagrin d'un vieux forcat; Molère, l'Avare, Acte III., sc. 5 (Est-ce à votre cocher . . . . . sous la mienne); Victor Hugo, Waterloo, Chap. IX.; Rouget de l'Isle, la Marseillaise; Arnault, la Feuille; Chateaubriand, l'Exilé; Théophile Gautier, la Chimère; Victor Hugo, Extase; Lamartine, l'Automme; De Musset, Tristesse; Sully Prudhomme, le Vase brisé; La Fontaine, le Chêne et le Roseau.

Meilhac et Halévy, l'Eté de la Saint-Martin; Chateaubriand, Memoires d'Outre-Tombe (selections pub. by Clarendon Press).

German: The texts contained in the High School German Reader.

Leander, Träumereien, pp. 45 to 90 (selected by Van Daell).

Baumbach, Der Schwiegershon; Elz, Er ist nicht eifersüchtig; Wichert, Post Festum.

September, 1907.

Senior Teachers' Examination.

(Circular No. 50).

1. Candidates who have already passed in one part of the Senior Teachers' examination under the regulations in force in 1905 and 1906 [see Reg. 50 (4)] may, as in 1907, complete at the examination in 1908 (but not thereafter) the list of subjects as prescribed for Parts I. and II. in Regulation 47. For such candidates the pass standard will be 34 per cent. of each paper and 50 per cent. of the aggregate of marks for the papers taken.

2. The following corrections have been made in the course in Upper School Geometry as given on p. 90 of the Regulations.

For

$$\cos\theta = \frac{AA' + BB'}{\sqrt{A^2+B^2}\ \sqrt{A'^2+B'^2}}$$

read

$$\tan\theta = \frac{A'B - AB'}{AA' + BB'}$$

Prefix signs as below:

$$-\frac{Aa+Bb+C}{Al+Bm}$$

$$\pm\frac{Aa+Bb+C}{\sqrt{A^2+B^2}}$$

On p. 91 for "Length of tangent" read "Square of tangent."

September, 1907.

Senior Teachers' Examination.

(Circular No. 50a).

Special Provisions for Public School Teachers.

Regulation 47.—The subjects of examination shall be those prescribed for the Upper School of the High Schools, and the examination may be taken at one time or in two parts at different times as follows:—

Part I.—English Composition and Rhetoric, English Literature, Mediæval History, Algebra, Geometry, Trigonometry, and Physics.

Part II.—History (Modern and British), Biology, Latin, with Chemistry and Mineralogy, *or* French and German, *or* Greek and German, *or* Greek and French.

Regulation 47 (above) is amended by the following addition:—

Section I.—The Senior Teachers' examination may be taken in four parts at different times, as follows:

Part I.—English Composition and Rhetoric, Algebra, Geometry;

Part II.—English Literature, Mediæval History, Trigonometry;

Part III.—Modern and British History, Latin, Physics;

Part IV.—Biology with Chemistry and Mineralogy, *or* French and German, *or* Greek and German, *or* Greek and French;

provided always that candidates take at least three of the four parts while actually engaged in teaching, and that they pass a practical examination in addition to the examination in the papers in Biology, Chemistry, and Mineralogy.

Section II.—(1) Candidates qualified under section I preceding, who have failed in one subject at an examination in one of the parts, but who have made 40% of the marks on each of the other two subjects and 60% of the total on said two subjects, may carry over to the examination in a part subsequently taken, the examination on the subject in which they have failed.

(2) Candidates qualified under section I preceding, who obtained Junior Leaving standard not later than 1900, may substitute for the course prescribed in Latin for the Senior Teachers' examination, the following courses in English Literature and the History of the English Language and Literature:—

1. English Literature.

Familiarity with and intelligent appreciation of the following texts:

Chauser:—The Prologue; Spenser:—The Faerie Queene—Book I.; Milton:—Paradise Lost—Book I., L'Allegro and Il Penseroso; Pope:—The Rape of the Lock, The Prologue to the Satires; Goldsmith:—The Traveller, The Deserted Village; Wordsworth:—Ode on Intimations of Immortality, The Reverie of Poor Susan, Lucy Gray, Hart-leap Well, Lines Composed a few miles above Tintern Abbey, Yarrow Unvisited, Yarrow Visited, Yarrow Revisited; Tennyson:—In Memoriam (one paper).

II. *The History of the English Language and Literature—*

A Brief History of the English Language—By O. F. Emerson (The Macmillan Co.).

The History of English literature as developed in the lives of the following in *The English Men of Letters Series*: Chauser, Spenser, Milton, Pope, Goldsmith, Wordsworth, Tennyson (one paper).

October, 1907.

GRADUATION DIPLOMAS, ENTRANCE EXAMINATIONS INTO THE FACULTIES OF EDUCATION AND THE NORMAL AND MODEL SCHOOLS, EXAMINING BOARDS. REGULATIONS APPROVED, OCTOBER, 1907.

(Circular No. 19).

Public School, Continuation Class, and High School Graduation Diplomas.

(Regulation 29 and the note to Regulation 43 (2) are hereby rescinded and the following substituted therefor.)

1.—(1) (*a*) Graduation Diplomas, signed by the Public School Inspector and the Principal of the school, may be awarded to pupils who have completed the Public School Fifth Class course, under such conditions as to class records, examining boards, and expenses, as may be arranged between the Public School Inspector and any Board or Boards of Public School Trustees or the County Council concerned. The Diplomas shall show the subjects of the course taken.

(*b*) On the requisition of the Public School Inspector, the papers prepared for the Model School Entrance Examination, based upon the Lower School course of the High Schools, will, if desired, under the arrangement provided for in (*a*) above, be supplied by the Education Department, free of cost, at such centres and under such Presiding Officers as may be approved by the Minister of Education. All the other expenses of the examination than those of said examination papers shall be met as may be arranged under (*a*) above.

(*c*) The subjects for Graduation Diplomas shall be at least the following subjects of the Fifth Form course of the Public Schools, with such additional subjects of the same course as may be selected under (*a*) above:

Reading, Literature, Grammar, Composition, Spelling, British and Canadian History, Geography, Writing, Arithmetic and Mensuration, and Elementary Science (Botany, Zoology, and Physics).

(*d*) The Board of Examiners for High School Entrance may accept such Graduation Diplomas for admission to a High School; but such Diplomas shall not qualify for admission to a Model School.

(2) Graduation Diplomas, signed by the Chairman of the Board and the Principal of the school, may be awarded by High School or Continuation Class Boards on the completion of the High School courses, under such conditions as may be arranged between the Board of Trustees and the Principal of the School.

Examinations for Entrance into the Professional Schools.

Explanatory Memo.

In the re-organized scheme of professional training there will be two main classes of training schools: the Normal Schools for the preparation of Second Class Public School teachers, and the Faculty of Education for the preparation of High School Assistants and First Class Public School teachers.

In addition to these, a few Model Schools of a new tpye, conveniently situated and efficiently organized, will be established for the preparation of Third Class teachers for school sections of the Districts and Counties whose financial and other conditions may prevent them from securing a higher grade of teacher. The new Third Class certificates will correspond to the present professional District certificates, and the Model School Entrance Examination to the Primary of 1892-1898. In 1908 this Entrance Examination will be that prescribed in Regulation 3 below; and, until further announcement by the Minister of Education, this examination will be held only in such Counties and Districts and the professional certificates based thereon shall be valid only for such schools, as each County Board may designate and as the Minister of Education may approve. [See Reg. 48, (1) and (2), of 1904.]

The three classes of re-organized training schools will differ in some important respects from those they will displace. In particular, the Normal Schools will provide a complete course of academic (non-professional) as well as professional training. As far as is practicable, the Faculties of Education and the Model Schools will make the same provision. In addition, the class examinations and the final and other written examinations will test both the scholarship and the professional competency of those who intend to become teachers.

So far as the following changes affect the High Schools and the Continuation Classes, they are intended to reduce the pressure of the Departmental Examinations on the Lower and Middle Schools of the High Schools and Continuation Classes, and, as a result of such reduction, to give the teacher greater freedom in his work and to enable him to give more and better attention to subjects of practical and vital importance which have suffered under the system hitherto in operation.

(Regulation 43-50 are hereby rescinded and the following substituted therefor.)

General.

2.—(1) Written examinations, as defined below, for entrance into the Normal Schools and the Faculties of Education, will be held by the Education Department, in July of each year, subject to the conditions hereinafter contained, at each High School and Collegiate Institute. and at such other centres as may be approved by the Minister of Education. Written examinations will also be held for entrance into the Model Schools at the close of the school year at such centres as the Minister of Education may select.

(2) (*a*) Candidates intending to write at any of these examinations shall make application to the public school Inspector before the 24th of May on an official form to be obtained from him.

(*b*) This official form of application shall include a certificate to be signed by the Principal of the school in which the candidate has completed his course that he has read carefully during the preceding year at least four enumerated suitable works in English Literature (both Prose and Poetry) in addition to those prescribed for the examination, and that he has taken up practically the course in Science. Without this certificate or other similar evidence satisfactory to the Public School Inspector, the candidate shall not be admitted to the examination.

Model School Entrance Examination.

3.—(1) The subjects of examination for entrance into the Model Schools shall be those of the Lower School of the High Schools, as follows:

Book-keeping and Business Papers, Art, Elementary Science, English Literature, Geography, Spelling, English Composition, Writing, English Grammar, History (British and Canadian), Arithmetic and Mensuration, Algebra, and Geometry.

(2) The Writing shall be judged from the Composition answer papers.

(3) The texts for the examination in English Literature will be prescribed by the Education Department from year to year. The Geometry for this examination shall consist of the practical course prescribed for the Lower School of the High Schools, and of the propositions in Euclid as prescribed for District certificates in Appendix C. The Elementary Science for this examination shall consist of the Botany, Zoology, Physics and Chemistry prescribed for the Lower School under the Regulations of 1904.

Requirements for Entrance into the Normal Schools.—Examination in July.

4.—(1) The obligatory subjects of examination for entrance into the Normal Schools shall be the following subjects of the Middle School course of the High Schools, as follows:

English Composition, English Literature, History (Ancient, British and Canadian), Algebra, Geometry, Physics, and Chemistry.

(2) The courses in Physics and Chemistry for this examination shall include those now prescribed for the Lower School, as well as those prescribed for the Middle School.

(3) Candidates for entrance into the Normal Schools who take also the papers in the Middle School course in Latin (the pass matriculation course) at the July Departmental examinations of the same year, and who make at least 34 per cent. on each of such Latin papers and 50 per cent. of the aggregate of the marks assigned to both papers, shall have the marks so obtained counted as part of the 60 per cent. required on the aggregate of the obligatory subjects.

Requirements for Entrance into the Faculties of Education.—Examination in July.

5. Except as provided below, the subjects of the Departmental examination for entrance into the Faculties of Education shall be those prescribed for the Upper School of the High Schools, and the examinations may be taken as follows:

(1) At one time or in two parts at different times, as follows:

Part I.—English Composition and Rhetoric, English Literature, Mediæval History, Algebra, Geometry, Trigonometry, and Physics.

Part II.—History (Modern and British), Biology, Latin, with Chemistry and Mineralogy, *or* French and German, *or* Greek and German, *or* Greek and French.

(2) In four parts at different times as follows, provided always that the candidates take at least three of the four parts while actually engaged in teaching, and that they pass a practical examination in addition to the examination in the papers in Biology, Chemistry, and Mineralogy:

Part I.—English Composition and Rhetoric, Algebra, Geometry;

Part II.—English Literature, Mediæval History, Trigonometry;

Part III.—Modern and British History, Latin, Physics;

Part IV.—Biology, with Chemistry and Mineralogy, *or* French and German, *or* Greek and German, *or* Greek and French.

Candidates who take at least three of the four parts while actually engaged in teaching and who have failed in one subject at an examination in one of the parts, but who have made 40 per cent. of the marks on each of the two other subjects and 60 per cent. of the total on said two subjects, may carry over to the examination in a part subsequently taken, the examination on the subject in which they have failed.

Candidates who take at least three of the four parts while actually engaged in teaching and who obtained Junior Teachers' standing not later than 1900, may substitute for the course now prescribed in Latin for entrance into the Faculties of Education the special courses in English Literature and the History of the English Language and Literature prescribed by the Education Department for those who qualify under this Regulation.

For special provisions for the examination of 1908, see Circular 50.

Additional Requirements for Entrance into the Faculties of Education and the Normal Schools.

6.—(1) In addition to the foregoing Departmental examination, a candidate for admission to a Faculty of Education or a Normal School shall pass at the University or the Normal School, in September, immediately before the session opens, an examination in the following subjects of the Lower School of the High Schools, unless he holds a certificate from the Principal of an approved High School or Continuation Class that he has completed satisfactorily the courses in said subjects:

Reading, Writing, Spelling, Book-keeping and Business Papers, Art, Biology, Geography, English Grammar, and Arithmetic and Mensuration.

(2) The Biology for this examination shall consist of the Botany and Zoology prescribed for the Lower School under the Regulations of 1904.

Approved High Schools and Continuation Classes.

7. An approved High School or Continuation Class shall be one which fulfils the following conditions:

(1) The Departmental Inspector concerned shall certify as follows to the Minister of Education and to the Dean of each Faculty of Education and the Principal of each Normal School:

(*a*) That the provision for teaching the Lower School subjects enumerated in Regulation 6 above is adequate and satisfactory. For the purposes of this certificate, Continuation Classes shall be under the same Regulations as to equipment and the programme and time-table of studies as are the High Schools. (See Reg. 40 (1) of 1904, and Reg. 40 (2) as amended below.)

(*b*) That the pupils' work in the courses prescribed in Regulation 6 above is satisfactory. For the purposes of this certificate, the Inspector concerned shall examine the classes as he may deem it expedient, and the pupils' work since last inspection, in Book-keeping and Business Papers, and Art, and their note-books in Science, which work and note-books the Principal concerned will preserve from inspection to inspection, as the Inspector concerned may direct.

(2) The preparation of the pupils, as evidenced by their work throughout the session, shall have been satisfactory to the Dean of the Faculty of Education and the Principal of the Normal School. In the case of schools in which the preparation has not been satisfactory, the Dean or the Principal

shall report the facts to the Minister of Education and to the Inspector concerned.

Examination Papers and Standards.

8.—(1) (*a*) One examination paper shall be set in each subject except in the case of Latin, Greek, French, German, and Biology, in each of which subjects there shall be two papers.

(*b*) The papers set for admission to the Faculties of Education and the Normal Schools shall be different from those set for University matriculation. Optional questions may be given in a paper at the discretion of the Board of Examiners. Candidates may substitute for one or more of the papers those set in a department for Honour Matriculation in the same or a more extensive course.

(*c*) At the examinations in English Composition an essay or a letter or both shall be required, to which special importance shall be attached. Questions in Rhetoric may also be set at the examination for entrance into the Faculties of Education; but no candidate shall be passed who does not satisfy the examiners in Composition.

(*d*) In addition to passages from the prescribed authors, sight passages shall also be set at the examinations in English Literature, Greek, Latin, French, and German.

(2) (*a*) Candidates will be required to make 60 per cent. of the aggregate marks of the papers on the subjects prescribed for the examinations, as well as 40 per cent. on each paper. Seventy-five per cent. of the aggregate will be required for Honours. Each examination paper shall be valued at 100.

(*b*) If, after all the answer papers have been read, any examination paper should be found by the Board of Examiners to be easier or more difficult than required, the minimum on the paper shall be correspondingly raised or lowered, and the total number of marks correspondingly increased or diminished.

(*c*) At all the examinations for entrance into the professional schools, a confidential report, signed by all the members of the staff concerned, as to the standing of their candidates will be taken into account in settling the results. Only the names of the candidates who, in the opinion of the staff, have completed satisfactorily the courses for the examination shall be included in this confidential report.

(*d*) Each candidate who makes the required aggregate may be awarded a certificate, even though he should fail to obtain the minimum in a subject, provided he was regarded as fit to pass in that subject by the staff, as shown from the confidential report sent to the Department before the examinations.

(3) (*a*) A candidate who has been duly admitted to but who has failed at the examination for entrance into the Faculties of Education may on application to the Minister of Education be granted a Normal School Entrance Certificate, provided he has obtained 40 per cent. of the aggregate of the marks for each part and 25 per cent. of the marks for each paper therefor.

(*b*) A candidate who has been duly admitted to and has failed at the examination for entrance into the Normal Schools or for entrance into the Faculties of Education, but who has obtained a standing satisfactory to the Minister of Education, may be granted a Model School Entrance Certificate.

(*c*) Reg. 43 (6), which provides that the standing of the third and fourth year in Arts, after a regular course in any University in the British Dominions, will be accepted in lieu of Junior and Senior standing respectively, shall remain in force only until July, 1908.

Examining Boards.

9. The Boards of Examiners for admission to the professional schools shall hereafter be selected as follows: For the Model Schools, from the staffs of the Model Schools; for the Normal Schools, from the staffs of the Normal Schools; and, for the Faculties of Education, from the staffs of said Faculties and of the Normal Schools; with, in the case of each Board, one or more of the Inspectors of Public and Separate Schools, Continuation Classes, and High Schools.

University Matriculation: Preliminary Examinations of Learned Societies.

10. The University Matriculation Examinations will be conducted by the Education Department as heretofore or as may be hereafter arranged between the Education Department and the University of Toronto, and the Learned Societies will have, as heretofore, the privilege of selecting the papers—University or Departmental—that will meet the requirements of their preliminary examinations. The results of such examinations will be communicated, also as heretofore, to such bodies by the Education Department.

Additional Amendments.

Reg. 39 (5): To this Regulation the following is added:

The Elementary Science of this course shall consist of the Botany and Zoology prescribed under the Regulations of 1904. The Physics and Chemistry shall be optional for the General Course.

Reg. 39 (8) and (9) are hereby rescinded, and the following is substituted therefor:

(8) A subject prescribed for one school division may be reviewed or continued in a higher division, as the principal may deem expedient.

Reg. 40 (2) is hereby rescinded, and the following is substituted therefor:

(*a*) For Biology, a lesson, in each year of the Lower School, of thirty minutes every day during the months of September and October and from the beginning of April to the end of June; or the equivalent thereof.

(*b*) For Physics and Chemistry, a lesson, in each year of the Lower School, of thirty minutes every day, or the equivalent thereof, during the rest of the school year.

The provision for special Middle School courses in Arithmetic and English Grammar on pages 79-80 of the Regulations of 1904 is hereby rescinded.

Schedule A.—[Regulation 2 (2) (b) above.]

Form of Certificate.

.....190...

I, ..., Principal of the High School (*or* Continuation Class) at ....., in the County of ....., do hereby certify that, to the best of my knowledge and belief, ...a candidate for entrance into ....., has read carefully during the past year, the following works in English Literature in addition to those prescribed for the examination: ...., and

that he has taken up practically the following courses in Science: .....
.....
.....
To the Public School Inspector, Principal.
.....

Schedule B.—[*Regulation 6 (1) above.*]

Form of Certificate.

.....190...

I, ..., Principal of the High School (*or* Continuation Class) at ....., in the County of ....., an "Approved School" under the Regulations of the Education Department, do hereby certify that ..... attended the above school from ..... to ....., and that ..... has completed satisfactorily the Lower School courses in:

Reading, Writing, Spelling, Business Papers and Book-keeping, Art, Biology, Geography, English Grammar, and Arithmetic and Mensuration.

.....
Principal.

To the Dean of the Faculty of Education
(*or* the Principal of the Normal School)
at .....

October, 1907.

Official Calendar of the Education Department for the Year 1908.

(Form 94).

Teaching Days for 1908.

High Schools and Collegiate Institutes and Public and Separate Schools in cities, Towns, and incorporated villages have the following number of teaching days in 1908:

Dates of Opening and Closing.

Open	3rd January.	Close	16th April.
Reopen	27th April.	Close	30th June.
Reopen	1st September.	Close	22nd December.

January	21	July	...
February	20	August	...
March	22	September	21
April	16	October	22
May	20	November	21
June	22	December	16
	121		80

Total.....201

Rural Public and Separate Schools have the following number of teaching days in 1908:

Dates of Opening and Closing.

Open..... 3rd January.	Close.....16th April.
Reopen.....27th April.	Close.....30th June.
Reopen.....17th August.	Close.....22nd December.

January	21	July	...
February	20	August	11
March	22	September	21
April	16	October	22
May	20	November	21
June	22	December	16
	121		91

Total.....212

NOTE.—Christmas and New Year's holidays (23rd December, 1908, to 3rd January, 1909, inclusive), Easter holidays (17th April to 26th April, inclusive), Midsummer holidays (for High Schools and Collegiate Institutes, and in cities towns and incorporated villages, from 1st July to 31st August, inclusive; Rural Schools, 1st July to 16th August, inclusive), all Saturdays and Local Municipal holidays, Dominion or Provincial Public fast or Thanksgiving Days, Labour Day [1st Monday [7th] of Sept.], and the anniversary of Queen Victoria's Birthday (Monday, 25th May), are holidays in the High, Public and Separate Schools, and no other days can be deducted from the proper divisor. The above named holidays are taken into account in this statement, so far as they apply to 1908, except any Public Fast or Thanksgiving Day, or Local Municipal holiday. Neither Arbor Day nor Empire Day is a holiday.

(The italicised portions in parentheses give the wording of the law and regulations as the authority for the dates.)

January:

1. NEW YEAR'S DAY (Wednesday).
   By-laws for establishing and withdrawal of union of municipalities for High School purposes to take effect. [H. S. Act, sec. 8 (1) (2)]. (*Not before 1st January*).
   First meeting of Rural School Trustees. [P. S. Act, sec. 17 (1)]. (*Wednesday following the annual meeting*).
   Polling day for trustees in Public and Separate Schools. [P. S. Act, sec. 60 (3); S. S. Act, sec. 31 (3)]. (*1st Wednesday in January, day following if a holiday*).
3. High, Public and Separate Schools open. [H. S. Act, sec. 45; P. S. Act, sec. 96; S. S. Act, sec. 81]. (*3rd day of January*).
4. Truant Officers' Reports to Department, due. (*Not later than 5th January*).
7. Provincial Normal Schools open (Second term). (*7th January*).
   Clerks of Municipalities to be notified by Separate School Supporters of their withdrawal. [S. S. Act, sec. 47 (1)]. (*Before 2nd Wednesday in January*).
   Principals of High Schools and Collegiate Institutes to forward list of teachers, etc. (*Not later than 7th January*).

14. Appointment of High School Trustees by Municipal Councils. [H. S. Act, sec. 13; Mun. Act, secs. 259 and 587]. (*2nd Monday in January*).
Annual Reports of Boards in cities and towns, to Department due. (*Before 15th January*).
Names and addresses of Public School Trustees and Teachers to be sent to Township Clerks and Inspectors. [P. S. Act, sec. 19 (3)]. (*Before 15th January*).
15. Trustees' Annual Reports to Inspectors, due. [P. S. Act, sec. 19 (6); sec. 118]. (*On or before 15th January*).
Annual Reports of Kindergarten attendance, to Department, due. (*Not later than 15th January*).
Annual Reports of Separate Schools, to Department, due. [S. S. Act, sec. 28 (18); 33 (9)]. (*On or before 15th January*).
Application for Legislative apportionment for inspection of Public Schools in cities and towns separated from the county, to Department, due. (*15th January*).
First meeting of Public School Boards in cities, towns, and incorporated villages. [P. S. Act, sec. 64 (1)]. (*3rd Wednesday in January*).
28. Appointment of High School Trustees by County Councils. [H. S. Act, sec. 13; Mun. Act, secs. 259 and 597]. (*4th Tuesday in January*).

February:

5. First meeting of High School Boards and Boards of Education. [H. S. Act, sec. 13 (1)]. (*1st Wednesday in February*).
29. Inspectors 'Annual Reports to Department, due. [P. S. Act, sec. 87 (5)]. (*On or before 1st March*).
Annual Reports from High School Boards, to Department, due. (This includes the Financial Statement.) [H. S. Act, sec. 16 (10)]. (*On or before 1st March*).
Financial Statement of Teachers' Associations to Department, due. (*On or before 1st March*).
Separate School supporters to notify Municipal Clerks. [S. S. Act, sec. 42 (1)]. (*On or before 1st March*).

March:

31. Night Schools close (Session 1907-1908). Reg. 16. (*Close 31st March*).

April:

1. Returns by Clerks of counties, cities, etc., of population, to Department, due. [P. S. Act, sec. 73]. (*On or before 1st April*).
13. Annual examination in Applied Science begins. (*Subject to appointment*).
15. Reports on Night Schools due (Session 1907-1908). (*Not later than the 15th April*).
16. High Schools, second term, and Public and Separate Schools close. [H. S. Act, sec. 45; P. S. Act, sec. 96; S. S. Act, sec. 81]. (*Thursday before Easter Sunday*).
17. Good Friday.
20. Easter Monday.
21. Annual Meeting of the Ontario Educational Association at Toronto. (*During Easter Vacation*).

27. High Schools, third term, and Public and Separate Schools open after Easter Holidays . [H. S. Act, sec. 45; P. S. Act, sec. 96; S. S. Act, sec. 81]. (*Second Monday after Easter Sunday*).
30. Notice by candidates for the High School Entrance Examination, to Inspectors, due. (*Before 1st May*). Reg. 23.

May:

1. Toronto University Examinations in Arts, Law, Medicine and Agriculture begin. (*Subject to appointment*).
   Arbor Day. (*1st Friday in May*).
22. Empire Day. (*1st school day before 24th May*).
   Notice by candidates for the District Certificate, Junior and Senior Teachers' Examinations, University Matriculation and Commercial Specialist Examinations to Inspectors, due. (*Before 24th May*).
25. Victoria Day (Monday).
26. Inspectors to report number of candidates for District Certificate, Junior and Senior Teachers', University Matriculation and Commercial Specialist Examinations. (*Not later than 26th May*).
30. Assessors to settle basis of taxation in Union School Sections. [P. S. Act, sec. 54 (1)]. (*Before 1st June*).

June:

1. Public and Separate School Boards to appoint representatives on the High School Entrance Boards of Examiners. [H. S. Act, sec. 41 (2)]. (*On or before 1st June*).
   By-law to alter School boundaries—last day of passing. [P. S. Act, sec. 41 (3)]. (*Not later than 1st June*).
7. University Commencement. (*Subject to appointment*).
12. Senior Matriculation Examination in Arts, Toronto University, begins. (*Subject to appointment*).
19. Provincial Normal Schools close (Second term). (*Third Friday in June*).
22. Inspectors' Report on Legislative grant due. (*Not later than 22nd June*).
23. Model School Entrance and Public School Graduation Examinations begin.
24. High School Entrance Examination begins. (*Subject to appointment*).
29. University Matriculation Examinations begin. (*Subject to appointment*).
30. High, Public and Separate Schools close. [H. S. Act, sec. 45; P. S. Act, sec. 96; S. S. Act, sec. 81]. (*End on 30th June*).
   Protestant Separate School Trustees to transmit to County Inspectors names and attendance during the last preceding six months. [S. S. Act, sec 12]. (*On or before 30th June*).
   Trustees' Reports to Truant Officers, due. [Truancy Act, sec. 12]. (*Last week in June*).

July:

1. Dominion Day (Wednesday).
   Last day for establishing new High Schools by County Councils. [H. S. Act, sec. 9]. (*On or before 1st July*).
   Legislative grant payable to Municipal Treasurers and Separate School Trustees in cities, towns and villages. [D. E. Act, sec. 23 (2)]. (*On or before 1st July*).

2. Examinations for Entrance to Normal Schools and Faculties of Education begin.
6. Examination for Commercial Specialists begins.
7. Art Specialists Examination begins.
10. Trustees' Report on purchases for Public School Libraries, to Inspectors due. (*On or before 10 July*).
15. Trustees' Financial Statement and Inspectors' Report on Continuation classes due. (*On or before 15th July*).

August:

1. Inspectors' Reports on School premises, due. (*Not later than 1st August*).
   Inspectors' Report on Rural Library grants due. (*Not later than 1st August*).
   Legislative grant for Rural Public and Separate Schools payable to County Treasurers and first instalment to District Trustees. [D. E. Act, sec. 23 (4-5)]. (*On or before 1st August*).
   Notice by Trustees to Municipal Councils respecting indigent children, due. [P. S. Act, sec. 65 (8); S. S. Act, sec. 28 (13)]. (*On or before 1st August*).
   Estimates from School Boards to Municipal Councils for assessment for School purposes, due. [H. S. Act, sec. 16(5); P. S. Act, sec. 65 (9); S. S. Act, sec. 28 (9); sec. 33 (5)]. (*On or before 1st August*).
   High School Trustees to certify to County Treasurers the amount collected from county pupils. [H. S. Act, sec. 16 (9)]. (*On or before 1st August*).
17. Rural, Public, and Separate Schools open. [P. S. Act, sec. 96; S. S. Act, sec. 81]. (*3rd Monday in August*).
25. Applications for admission to County Model Schools to Inspectors, due. Reg. 59. (*Not later than 25th August*).

September:

1. High Schools, first term, and Public and Separate Schools in cities, towns and incorporated villages open. [H. S. Act, sec. 45; P. S. Act, sec. 96; S. S. Act, sec. 81]. (*1st day of September*).
2. County Model Schools open. Reg. 58. (*2nd of September*).
7. Labor Day. (*1st Monday in September*).
8. Provincial Normal Schools open (First term). (*2nd Tuesday in September*).
30. Trustees to report to Inspector amount expended for Free Text Books. (*Before 1st October*).

October:

1. Night Schools open (Session 1908-1909). Reg. 16. (*Begin on 1st October*).
   Notice by Trustees of cities, towns, incorporated villages and township Boards to Municipal Clerks to hold Trustee elections on same day as Municipal elections, due. [P. S. Act, sec. 61 (1)]. (*On or before 1st October*).
31. Inspectors' application for Legislative aid for Free Text Books to Rural Schools. (*Not later than 1st November*).

November:

9. King's Birthday (Monday).

December:

1. Last day for appointment of School Auditors by Public and Separate School Trustees. [P. S. Act, sec. 22 (1); S. S. Act, sec. 28 (5)]. (*On or before 1st December*).
   Municipal Clerks to transmit to County Inspectors statement showing whether or not any county rate for Public School purposes has been placed upon Collector's roll against any Separate School supporter. [P. S. Act, sec. 72 (1); S. S. Act, sec. 52]. (*Not later than 1st December*).
8. Returning Officers named by resolution of Public School Board. [P. S. Act, sec. 60 (2)]. (*Before 2nd Wednessday in December*).
   Legislative grant payable to Trustees of Rural Public and Separate Schools in Districts, second instalment. [D. E. Act, sec. 23 (5)]. (*On or before 1st December*).
   Last day for Public and Separate School Trustees to fix places for nomination of Trustees. [P. S. Act, sec. 60 (2); S. S. Act, sec. 31 (5)]. (*Before 2nd Wednesday in December*).
9. County Model Schools Examination begins. (*During the last week of the Session*).
14. Local assessment to be paid Separate School Trustees. [S. S. Act, sec. 58]. (*Not later than 14th December*).
15. County Model Schools close. Reg. 58. (*Close on 15th day of December*).
    Municipal Councils to pay Secretary-Treasurers of Public School Boards all sums levied and collected in townships. [P. S. Act, sec. 71 (1)]. (*On or before 15th December*).
    County Councils to pay Treasurers of High Schools. [H. S. Act, sec. 33]. (*On or before 15th December*).
18. Provincial Normal Schools close (First term). (*End 18th day of December*).
22. High Schools, first term, and Public and Separate Schools close. [H. S. Act, sec. 45; P. S. Act, sec. 96; S. S. Act, sec. 81]. (*End 22nd December*).
24. Last day for notice of formation of new School sections to be posted by Township Clerks. [P. S. Act, sec. 12 (5)]. (*Six days before last Wednesday in December*).

25. Christmas Day (Friday).

    High School Treasurers to receive all moneys collected for permanent improvements. [H. S. Act, sec. 39 (1)]. (*On or before 25th December*).
    New Schools and alterations of School boundaries go into operation or take effect. [P. S. Act, sec. 25 (2); sec. 41 (3); sec. 42 (3); sec. 46 (10); S. S. Act, sec. 4]. (*Not to take effect before 25th December*).
    By-law for disestablishment of Township Boards takes effect. [P. S. Act, sec. 31]. (*Not until 25th December*).
30. Annual meetings of supporters of Public and Separate Schools. [P. S. Act, sec. 14; sec. 60 (1); S. S. Act, sec. 27 (1); sec. 31 (1)]. (*Last Wednesday in December, or day following if a holiday*).
    Reports of Principals of County Model School to Department, due. (*Before 31st December*).

Reports of Boards of Examiners on Third Class Professional Examination, to Department, due. (*Before 31st December*).

31. Protestant Separate School Trustees to transmit to County Inspectors names and attendance during the last preceding six months. [S. S. Act, sec. 12]. (*On or before 31st December*).

Trustees' Reports to Truant Officer due. [Truancy Act, sec. 12]. (*Last week in December*).

Auditors Reports of cities, towns and incorporated villages to be published by Trustees. [P. S. Act, sec. 65 (11)]. (*At end of year*).

November, 1907.

Travelling Libraries.

(Circular No. 18).

Regulations.

1. On satisfactory guarantee that all regulations will be complied with, Travelling Libraries may be lent to small Public Libraries.

2. The Library Board must be personally responsible for loss or injury beyond reasonable wear.

3. Books (only one case at a time) will be loaned without charge excepting the payment of damages for loss or injury to books beyond reasonable wear. The charges for transportation from the Education Department, or from the Public Library from which the Travelling Library may be shipped, are to be paid by the borrowing library, but charges for returning the books to Toronto are to be paid by the Department.

4. The Travelling Library shall not be kept longer than three months after its reception, except by special permission from the Minister of Education.

5. The Librarian shall care for the books while under his control, circulate them in accordance with the Regulations of the Department and the Rules of the Library, and make required reports respecting their use.

6. The books will be carefully selected for each Travelling Library, but the Department will not undertake to furnish other books than those forming each library collection.

7. So far as possible the works of standard authors will be selected, including books of natural and social science, biography, history and travel, in addition to a moderate proportion of fiction.

8. The Library shall be open for obtaining and returning books at such times as the Library Board shall direct.

9. The Library Board may require each borrower to pay promptly any fines due for over-detention of books, or for injuries of any kind beyond reasonable wear to any book charged to him.

10. All corrections of the text, or marks of any kind on books belonging to the Travelling Library are unconditionally forbidden, and all losses or injuries beyond reasonable wear must be promptly adjusted to the satisfaction of the trustee by the person to whom the book is charged.

November, 1907.

Amendments to the Regulations, 1907.

(Circular No. 1).

Model School Examinations.

Third Class and District Certificates.

Owing to the late date at which the results of the recent appeals were announced, those students who were admitted to the Model Schools pending the results of their appeals, but whose appeals have not been sustained, may complete their professional course at these training schools. Such students may be awarded certificates by the Minister of Education, provided they pass in 1907 the Model School Examination and, in 1908 the Academic (non-professional) Examination for entrance to a Normal School.

The report of the County Board should show the standing of such students; but the Board has no authority to issue them certificates of any kind.

County Boards are reminded that under Regulation 63 District Certificates can be issued only with the permission of the Minister of Education. The report of the Board should set forth in full detail the reasons for its request.

Permanent Third Class Certificates.

The Minister of Education may grant Second Class Interim Certificates to holders of Permanent Professional Third Class Certificates who attend the course and pass the final examination of the professional Summer School, of Normal School standard, to be held in 1908, who also pass the final examinations in Groups I. and II., and an examination in the subjects of Group III. of the Normal Schools, and whose success and ability as teachers have been certified to, before they attend the Summer School, by the Inspector under whom they last taught.

Renewal of Third Class Certificates

Regulation 87 is hereby amended by adding the following provision:

Only in case of a scarcity of teachers in an inspectoral district and on the application and recommendation of the Public or Separate School Inspector, the Minister of Education may renew, without examination, for a period of not longer in any case than until July, 1909, a Third Class Certificate which has already been renewed under Regulation 87; but all such renewals shall be issued by the Minister of Education and shall be limited to the jurisdiction of the Inspector on whose application and recommendation such renewal has been granted.

November, 1907.

Draft Syllabus of Studies and Regulations for The Normal Schools at London, Ottawa, and Toronto. Session of 1907-1908.

Memorandum. This Syllabus of Studies and Regulations is in force during the present session of the Normal Schools. Before it is adopted for a period of years, certain necessary changes will be made in it to suit the

situation next September; also such modifications as a year's experience of its operation may render desirable.

The Purpose of the Normal Schools.

1. The purpose of the Normal Schools is to prepare the teachers of the Second Class, in the theory and the art of organizing, governing, and instructing the pupils of the Public and Separate Schools; and to improve the general culture of such teachers, and, in particular, their academic preparation for teaching the subjects prescribed in the programme of studies.

The special purpose of the Provincial Model Schools, the Model affiliated Public Schools, and the Affiliated Rural Schools, is to afford the teachers-in-training adequate means of observing a well-conducted School, and of securing practice in teaching, discipline, and management.

Session and Terms.

2. The Session of the Normal Schools for 1907-1908 will extend from the third Tuesday in September to the third Friday in June, and will consist of two terms; the first lasting from the opening of the School until the 20th of December, 1907, and the second, from the 7th of January until the third Friday in June, 1908.

Conditions of Admission.

3.—(1) Application for addmission shall be made to the Deputy Minister of Education not later than the first day of September, on a form to be supplied by the Education Department. Each applicant shall send with this application:

(*a*) A certificate from competent authority that he will be at least eighteen years of age on or before the close of the Session.

(*b*) His certificate of having passed the July Departmental Examination for entrance into the Normal Schools.

(*c*) His Sessional fee of $10.00.

(2) Each applicant on presenting himself at a Normal School shall submit to the Principal thereof:—

(*a*) A certificate from the Principal of an approved High School or Continuation Class that he has completed satisfactorily the subjects of the Lower School prescribed for the Normal School Entrance Examination. Failing this certificate, he shall pass at the Normal School in September immediately before the beginning of the session an examination in said subjects. (In force after the present session. See Circular No. 19.)

(*b*) A certificate from a clergyman or other competent authority that he is of good moral character.

(*c*) A certificate from a physician that he is physically able for the work of a teacher, and especially that he is free from serious pulmonary affection and from seriously defective eyesight and hearing.

(3) A teacher-in-training who, in the opinion of the staff, is unduly defective in scholarship or in natural aptitude, or whose progress or conduct is unsatisfactory, may be dismissed by the Principal at any time during the session from further attendance at the Normal School.

Duties of Principals, Assistants, and Teachers-in-training.

4.—(1) Subject to the Regulations and to the approval of the Minister of Education, the Principal of each Normal School shall prescribe the duties of his staff and shall be responsible for the efficiency of the Normal and Model Schools.

(2) The Assistant Masters of each staff shall be subject to the authority of the Principal.

(3) Each Normal School Master shall, in company with the Public School Inspector, spend one week each year visiting the rural schools in the district in which the Normal School is situated, selecting a different county each year. He shall submit a written report of his observations for the consideration of the whole staff.

(4) (*a*) The teachers-in-training shall attend regularly and punctually, and shall submit to such discipline and directions as the Principal may prescribe.

(*b*) They shall board and lodge at such houses only as are approved of by the Principal.

Text-Books.

5. The text-books for the academic work shall be those prescribed for the High Schools in the subjects of the Normal School course. The text-books for the professional work shall be those prescribed for the Public Schools, and those printed below in italics.

Library.

6. Under the direction of the different members of the staff, the Library shall be constantly used for consultation by the teachers-in-training. To this end it contains a supply of books of general literature, and a sufficient number of copies of each of the most important professional books of reference.

Literary Society.

7. A Literary Society for general culture and for professional advancement shall be established in each Normal School, and shall be fostered by the staff as an important part of the Course of Study. It should begin immediately after the work of organization has been completed, and should last until the special preparation for he final examination begins. The programmes should include essays, debates, and the reproduction of suitable scenes from standard plays. Suitable lecture courses will also be arranged for with the concurrence of the Minister of Education.

Normal School Programme of Studies.

8. The courses at the Normal Schools shall consist of the following:—

(1) A review of the academic subjects prescribed for admission into the Normal Schools, especially those of the Lower School, from the standpoint of pedagogy and the requirements of the Public and Separate Schools, with such an extension of said subjects for the purpose of culture as time will permit; also special instruction in Reading, Writing, Art, Physical Culture, Physiology and Personal Hygiene, Music, Household Science, Manual Training, School Law and Regulations, Morals and Manners.

(2) The Science of Education, including Applied Psychology, the Kindergarten, Child Study, and General Methodology; the History of Education; Special Methodology; and School Organization and Management.

(3) Supervised Observation in the Model Schools; also in affiliated Rural Public Schools of the adjoining county or counties.

(4) Supervised Practice-teaching in the Model Schools.

Order of the Introductory Courses.

9. In order that the teachers-in-training may begin early the course in Practice-teaching, Introductory Courses shall be taken up in the following subjects in the following order:

(1) A discussion of the aims of Education and of the functional value of each subject in the Normal School and the Public School programme of studies.

(2) The course in General Method and in Questioning; Lesson Plans.

(3) A course of Observation in the Model Schools, beginning with the lowest grade and going systematically through the different forms.

Observation and Practice Teaching.

10.—(1) The Introductory Courses shall be followed by systematic Observation and Practice-teaching, the minimum number of Observation lessons being 40 and of Practice-teaching lessons 25, which numbers shall each be increased according to the necessities of individual teachers-in training.

(2) The students shall be divided into suitable groups, and the work shall be done systematically per schedule arranged from time to time.

(3) Both observation and practice-teaching shall be supervised, first, by the Normal School teacher of the subject, then by the Model School teachers of the same subject.

(4) Teachers-in-training shall be notified of the subject and scope of the lesson to be observed.

(5) The teachers-in-training shall prepare beforehand the lesson to be observed, and shall, after observing said lesson, submit a report upon it for discussion with the Normal and Model School Masters concerned.

(6) Normal School Masters in charge of the academic work in a subject shall develop its details in their teaching order; and, after each suitable step, shall themselves teach model lessons, applying the principles of Education and the special methods discussed in class. At these lessons the Model School Masters concerned shall be present as often as may be practicable.

(7) Teachers-in-training shall prepare a practice-teaching lesson plan for submission to the teacher in charge, who, after any necessary criticisms thereof, shall supervise the class work and discuss it with them as soon as practicable thereafter.

(8) At least the group of teachers-in-training to which the teacher-in-training belongs, shall be present at the discussions on his observation and practice-teaching lessons.

(9) The observation and the pratice-teaching lessons provided for in the logical development of the course shall be supplemented by other lessons in such forms of the Model School as may be available. Continuous practice-teaching for several periods towards the end of the course shall be required, the teacher-in-training being wholly responsible for the discipline of the

class. Teachers-in-training shall be available as substitute teachers in the Public Schools of the locality (urban or rural) in which a Normal School is situated, subject to arangement with the Principal of the Normal School

(10) Concerted work on the part of the Normal and Model Schools shall be secured by frequent conferences of the teachers and by combined discussion of the observation and practice-teaching as opportunity may offer.

(11) The observation and practice-teaching for each teacher-in-training shall, as far as practicable, be arranged so as to cover the work of the Public Schools in all subjects and in all grades.

(12) Concurrently with the observation and practice-teaching, Child Study shall be taken up, the necessary applications being made in connection with the model lessons and the observation and practice-teaching; so that course and methods may be taught in terms of the child's mind and growth.

Examinations.

Subjects and Values.

11.—(1) (*a*) The final standing of the teacher-in-training shall be determined by the combined results of his Sessional records and final examinations. The Sessional records shall include the observation and practice-teaching and the other oral and written tests.

(*b*) In addition to oral and written class tests in each subject, there shall be two written examinations on the subjects of Groups I. and II. below; a Sessional one at the close of the first term, and a Final one (including the Supplemental) at the close of the Session. Each of these examinations shall be based on the work preceding it. The Final examination papers shall be uniform for all the Normal Schools.

(*c*) The examinations in Groups II. and III. shall include a thorough test of the academic qualifications of the teacher-in-training for teaching all grades of Public School work.

(2) At each examination in Groups I. and II. there shall be one paper in each of the following subjects, and the maximum marks shall be as follows (the marks for the Sessional examination and for the Records in each subject being each one-sixth of the whole):—

Group I.

Professional. Science of Education, 300; History of Education, 200; School Organization and Management, 200.

Group II.

Academic and Professional. Arithmetic, Algebra and Geometry, Literature, Grammar, History, Composition, Geography, Nature Study and Elementary Science, each 150.

Group III.

(3) The marks counted in estimating the final standing of the teacher-in-training in the following subjects shall be those awarded him during the Session, more especially towards the close thereof, for the oral and written tests in matter and, where applicable, in method, the maximum for each subject being as follows: —

Academic and Professional. Art and Reading, each 150; Music, Physical Culture, Manual Training, and Household Science, each 100;

Spelling, Writing and Bookkeeping, Physiology and Personal Hygiene, and School Law and Regulations, each 75.

Group IV.

(4) The marks counted in estimating the final standing of the teacher-in-training in Observation and Practice-teaching shall be those awarded him in these subjects during the Session and more especially towards the close thereof, after an introductory course of lessons in each. The maximum marks for Practice-teaching and Observation shall be 1,450, of which the marks for Practice-teaching shall be 1,200 and those for Observation lessons 250.

Standard.

12.—(1) Any candidate who obtains 40 per cent. of the marks in each subject of each group, 60 per cent. of the marks for Group IV., and 60 per cent. of the total of the marks, shall be entitled to an Interim Second Class Certificate, which will be made Permanent after two years' successful teaching on the report of the Inspector or Inspectors concerned.

(2) A candidate who, in addition to the requirements in (1) preceding, obtains 75 per cent. of the total marks, shall be awarded Honours.

(3) A candidate who makes less than 60 per cent., but at least 50 per cent. of the total marks, and who passes in Group IV., and in each subject of the other groups, may, on the recommendation of the staff, be awarded a Third Class Certificate, valid for one year.

(4) A candidate who makes at least 60 per cent. of the total and passes in Group IV., but who fails in not more than two of the subjects of Group I., II. or III., may, on the recommendation of the staff, be awarded a Third Class Certificate, valid for one year.

(5) A candidate qualified as in (3) preceding, may, upon the recommendation of the staff, be awarded an Interim Second Class Certificate after one year's successful teaching and after passing a supplemental examination in all the subjects of the group in which the staff had reported him as insufficiently prepared.

(6) A candidate qualified as in (4) preceding may be awarded an Interim Second Class Certificate after one year's successful teaching and after obtaining at a supplemental examination not less than 60 per cent. in each of the subjects in which he originally failed.

(7) A candidate making less than 50 per cent. of the total marks shall be required to attend a Normal School for another term.

Science of Education.

13. The object of the course in the Science of Education is to provide the teacher with a working conception of the nature of education which will be useful to him in forming ideals and determining procedure, and to give him a rational basis for intelligently evaluating and selecting subject matter and methods of instruction. The course is intended to improve natural tact and skill through the acquisition of experience, with the least expenditure of time and energy. The course (taken twice a week throughout the session) includes General Methodology, Applied Psychology, Child Study, and the Kindergarten, as follows:—

I. *General Methodology.*

General Method forms a basis for the lessons in Special Methods and enables the teacher-in-training early in the session to observe and to teach intelligently.

The topics of the course are at first considered in simple outline, to be filled in and made more definite later on in connection with the development of the same subjects in the other parts of the course in the Science of Education. The principles are introduced and illustrated by the teaching of typical lessons selected from a variety of subjects.

The course includes the discussion of the following topics:—

(1) The transition from the practical to the intellectual attitude in learning.

(2) Learning as an attitude of enquiry; the importance to the learner of a consciousness of an end; how and when the aim of the lesson should be presented.

(3) The necessity of an adequate equipment in previous experiences as means to the end; the process of learning as the interaction between the old and the new; the means of calling up the experiences of the pupil to be utilized in reaching the end.

(4) The direction of mental movement to the end as movement within a mental whole (*a*) towards the particular, (*b*) towards the general; the relation of these movements to each other; the learning process as an analytic-synthetic process, a transition from a vague mental whole to a defined mental whole through analysis giving particulars and synthesis determining unity: individual and general notions distinguished.

(5) The analytic phase in learning; the selection and adaptation of relevant analysis; the place of sense-perception, telling and inference in the development of individual notions; meaning of "analytic methods" of teaching.

(6) The synthetic phase in learning; the adaptation and use of selected material to reach the end; the development and application of general notions; the meaning of "synthetic methods" of teaching.

(7) The relation of induction to deduction in the process of learning and in methods of teaching.

(8) Expression as a stage in method; the relation of impression to expression; forms of expression; place and value of definitions.

(9) Criticism of common educational maxims, such as, "From the concrete to the abstract," "From the known to the unknown," "From the whole to the part;" the Herbartian stages in instruction considered and criticized.

Books of Reference.

McMurry's *The Method of the Recitation.*
Bagley's The Educative Process.
De Garmo's Essentials of Method.

II. *Applied Psychology.*

Special attention at each stage in the course outlined below is given to the pedagogical conclusions to be derived from the psychological principles considered; and, as far as possible, illustrative application of these conclusions is made to the teaching of the different subjects of the curriculum and to the general work of the school. The course, which is intended

to be a SIMPLE and PRACTICAL one, includes the discussion of the following topics:—

(1) *Aim of Education.*
Individual and social phases of education, their relation.

(2) *The Educational Process.*
Its nature and relation to the end and means of education.

(3) *Subject Matter of Instruction.*
The principle of correlation and concentration of studies; the function and content of educational science.

(4) *Method of Instruction.*
The relation of method to subject matter; the problem of method as a psychological problem.

(5) *Psychology.*
Field of psychology; methods of psychological enquiry; the use of psychology to the teacher.

(6) *Habit.*
Automatic and reflex acts; primary instincts; development of reflexes; formation of habits and the development of motor control; characteristics and results of habit; the relation of habit to will; the intellectual and ethical aspects of habit.

(7) *Attention.*
Nature of attention as a process; conditions of attention; forms of attention; interrelation of forms of attention; attention in young children and in adults compared; divided attention and concentration of attention; discrimination, association; interest, its nature and relation to attention; methods of securing and retaining attention; obstacles to attention.

(8) *Apperception and Retention.*
Meaning of the terms; their relation; mental assimilation, growth and development.

(9) *Sensation.*
Distinctive characteristics of sensation; relation of sensation to knowledge; neural basis of sensation; classification of sensations and more detailed study of sensations of special senses.

(10) *Perception.*
Distinctive characteristics of perception; perception distinguished from sensation; genesis and development of perception; neural processes in perception; training of perception and formation of habits of observation.

(11) *Imagination.*
Conditions of representation; distinctive characteristics of imagination; relation of image to idea; mode of operation of imagination; reproductive imagination, productive imagination, association of images, conditions of association; genesis and function of imagery; training of imagery

(12) *Memory.*
Distinctive characteristics of memory; conditions of retention, recall, recognition; training and development of memory processes; logical method of memorizing.

(13) *Conception.*
Distinctive characteristics of conception; relation of concept and image; the function of language in the formation of concepts; general function of

conception; development of conception, formation of new concepts and the enrichment of old concepts; the place and use of definition.

(14) *Judgment and Reasoning.*

Distinctive characteristics of judgment; relation of concept and judgment; the distinctive characteristics of reasoning; general function of reasoning; deductive and inductive reasoning compared; training in judgment and reasoning.

(15) *Affective Elements of Consciousness.*

Involution of feeling and cognition; elementary forms of affection, affection in its relation to sensation, perception, imagination, memory and reasoning; significance of affective consciousness.

(16) *Emotion.*

Distinctive characteristics of emotion; condition of emotional development; significance of emotions; classification of emotions; training of emotions.

(17) *Development of Will.*

Impulsive and volitional acts distinguished; distinctive characteristics of volition; relation of want, desire and motive, and relation of deliberation, effort and choice in an act of will; definition of character; character development as increasing power of selection of ends and means, increasing emotional responsiveness to true worths, and increasing practical force for the realization of the ends selected and felt to be worthy; means of character development.

Books of Reference.

Angell's *Psychology.*
Bett's Mind and its Education.
Titchener's Primer of Psychology.

III. *Child Study.*

Child Study enables the teacher-in-training to adopt intelligently his methods in each subject to the child's mind at the different stages of its growth. The course includes the following topics:

(1) The Scope of Child Study.

(2) Methods of investigation; importance of the interpretation as well as the discovery of the child's activities.

(3) The child's physical characteristics.

(4) Mental types and variations of normal mental conditions.

(5) The development of the personality of the child.

(6) Children's motives.

(7) The influence of the child's environment.

(8) The study of children along the lines suggested in the course of Applied Psychology.

Books of Reference.

Kirkpatrick's *Fundamentals of Child Study.*
King's Psychology of Child Development.
Tracy's Psychology of Childhood.

History of Education.

14. The study of the History of Education widens the professional outlook and rationalizes school practice through the discussion of the development of educational theories. It interprets such theories and practices in their relation to the social ideals and processes of their day and the continuity of their development, and in the light of the Science of Education. As a phase of the history of civilization, it requires an historical background; as a treatment of varying national ideals, it discusses movements rather than individuals. The course (taken once a week throughout the session) includes the following topics:—

(1) *Education in a Primitive Society.*

The place of primitive society in the history of civilization; its characteristics; the significance of the experience of life in such society; the transmission of these experiences; the evolution of customs and ideals; the relation of customs and ideals to institutions; the dominance of institutions; the family and education.

(2) *Oriental Education.*

Education as a conscious or unconscious means of perpetuating national character; the permanence of customs and social ideals in the Oriental world; Chinese, Hebrew, and Hindu education as types.

(3) *Greek Education.*

The education ideals of Eastern and Western nations compared; the Greeks, their social organization, the city state, their ideals, religion, art, and national games; old Greek education, with Spartan education as its type; new Greek education with Athenian education as its type; Athenian schools; music and gymnastics; tendency towards individualism; the sophists and the great educational theorists, Socrates, Plato, and Aristotle; the idea of a liberal education.

(4) *Roman Education.*

National ideals of Rome and Greece contrasted; social organization of the Romans; their characteristics, their virtues; educational ideals; periods of Roman education; Roman schools; great educational theorists, Cicero and Quintilian; the idea of a practical education.

(5) *Education in the Middle Ages.*

Contrast between the Classic and the Mediæval world; life in the Middle Ages; influence of Christianity on education; early Christian schools; the education of the cloister and the castle; their educational aims and methods; the origin and growth of the Universities.

(6) *The Renaissance and the Rise of Humanism.*

The relation of the Renaissance to modern civilization; its origin and progress; its educational significance; its educational leaders, Da Feltre, Erasmus, Ascham, and Sturm; its influence upon subject matter, methods, and purposes; humanistic conception of education; humanism and realism.

(7) *The Reformation and the Counter-Reformation.*

The Reformation and the Renaissance; Luther and elementary education in Germany; schools of the Jesuits and other religious orders.

(8) *Realism and Science in Education.*

The characteristics of the ages; educational tendencies; humanism and culture vs. realism and utilitarianism; verbal realism as represented by Rabelias and Milton; social realism as represented by Montaigne; sense realism as represented by Ratich, Bacon, Mulcaster, and Comenius; the place of Bacon and Comenius in the history of education.

(9) *Education according to Nature.*

Development of the new conception of education; Locke, Rousseau, and Basedow; nature vs. culture; significance of the work of Locke and Rousseau.

(10) *Modern Educational Theories.*

(*a*) The Psychological ideal as represented in Pestalozzi and his work for the elementary school, Herbart and his Methodology, Froebel and the Kindergarten.

(*b*) The Sociological ideal. The application of scientific methods to "aims and values" in education; the knowledge of most worth. Spencer; education as social adjustment.

(11) *Contemporary Tendencies in Education.*

The development of public education in Germany, Great Britain, France, and the United States. The development of public education in Ontario.

Books of Reference.

Monroe's *Brief Course in the History of Education.*
Kemp's The History of Education.
Quick's Educational Reformers.

School Organization and Management.

15. The object of the course is to give the teacher, in the light of the principles of education, a knowledge of the technique of school management and organization, which will enable him to secure the smooth and efficient working of his school. The course (taken twice a week throughout the session) includes the following topics:—

(1) *Classification.*

The meaning and the problems of school organization; the advantages and the disadvantages of graded and of ungraded schools; the value of proper classification; the bases for classification; number and size of classes; over-classification in small schools; the advantages and the disadvantages or rigid classification; promotions, when and how made; in graded schools, the division of subjects and pupils among the several teachers.

(2) *The Daily Programme.*

Its purpose and value; principles involved in the construction of a time-table—the relative importance of the different subjects; variety and

distribution of studies: seat work; individual blackboard work; the question of fatigue; opening and closing exercises; value of recesses; the number of pupils and the number of classes; rigid adherence to the time-table; constructing typical time-tables for graded and for ungraded schools; school records.

(3) *Teaching.*

What is meant by teaching; learning, the measure of success; teacher to know the subject, the child, and the method; characteristics of good teaching; evils of formalism; stimulus of the teacher's ability, manner and sympathy; value of individuality in teaching; working *with* the pupils not *for* them; discursiveness in teaching; keeping in touch with the class; teaching children, or teaching a subject; speed in teaching; the teacher's voice, language, position, etc.

(4) *Technique of Class Instruction.*

(*a*) Characteristics of a good lesson: Orderly arrangement, unity of idea, variety in detail, suitability in illustration, harmony of effect, perfection in technique, proper drill or recapitulation; common defects; no definite aim, lack of clear logical plan, useless introductions, attempting too much, defective knowledge, important and unimportant points not clearly distinguished, unnecessary digressions; clumsy presentation, too much or too little drill, etc., effects of over-teaching; getting interest and sympathy of pupils.

(*b*) Typical forms of lessons:

The lecture or telling lesson; its place and limitations.

The inductive development lesson; its place and function; the principle of selection and methods of presenting concrete material; methods of developing and applying general notions.

The deductive development lesson; its object; its use as anticipatory and explanatory; the principle of selection and methods of presenting data and general principles; methods of leading pupils to apply general principles to data and to draw inferences.

The study lesson: Value of book study; union of teaching and book study; the necessity for training pupils to get knowledge from books; the need of assigning lessons in a definite, interesting way; assigning by questions or by topics; value of outline formed by teacher and by pupils; the art of study acquired, not taught; home lessons, their use and abuse; seat-work, importance and varieties.

The recitation lesson: The necessity for holding pupils responsible for assigned work; differences between a recitation and merely "hearing a lesson"; value of the recitation: in requiring connected and intelligible expression, and in the gain to the individual child from the knowledge and criticisms of his fellows; effects in cultivating habits of attention and analysis; and in stimulating pupils; attention to detail.

The drill lesson: Its purpose, habit-formation and the development of power especially in the school arts; knowledge made clearer as well as more permanent; clear ideals to guide; drill as distinguished from review; mere parrot exercises valueless; aimless or excessive drills; concert drills.

The review lesson: Its purpose; correct and incorrect forms of review lessons; nature and value of thoroughness; methods of obtaining thoroughness.

The testing lesson: Its function and value; knowledge tested by expression, by application; power tested by its exercise; skill tested by doing; when tests are useful, when valueless.

Examinations: Effects in developing mental grasp, strengthening the memory, securing independent persistent effort, revealing success or failure; influence on character of teaching and on pupil's work; evil effects: a narrowing tendency, induce cramming, effects on health; school results that connot be tested by examinations; how to set examination papers; reading and valuing the answers; value of oral tests, of concert tests; examinations as related to promotions.

(*c*) The relation of class instruction to individual instruction:

Advantages of class instruction: Its economy; its educative influence in teaching the subordination of individual impulses to the welfare of the class as a whole; the stimulus gained through emulation and the group instincts.

Defects of a rigid class instruction; value of the individual system; study of various systems of compromise between class and individual instruction; dealing with inattentive children, with dull or backward children.

(*d*) Lesson outlines or plans:

Gathering, selecting, and arranging knowledge; suitable introduction; adapting method to class, to subject; the plan not to restrict teacher's freedom; foreseeing difficulties; preparing for individuals; arranging lessons in series.

(*e*) Criticism of lessons:

Purposes and value of lesson criticism; analysis of good teaching to precede criticism of poor teaching; qualifications of a good critic; three requisites in criticism: justice, thoroughness, fruitfulness; critic to know the aim and subject matter of lesson and to be in sympathy with teacher; leading points of criticism; oral or written reports of criticism; what to avoid in criticism; the teacher's self-criticism.

(*f*) Teaching devices:

Questions: Aims and value of questioning; the complement of lecture and illustration; testing and training questions, purposes and value of each, when to be used; Socratic questions, meaning and worth; leading questions, alternative questions; "Yes" or "No" questions; elliptical questions; qualities of a good question; qualifications of a good questioner; over-questioning; questions beyond the capacity of the majority; adapting questions to individuals; questions varied in form, connected in series, put in an engaging way; simultaneous, consecutive, promiscuous, combined methods of distributing questions; questioning as an aid to discipline.

Answers: What is involved in answering; qualities of a good answer; treatment of answers partly right; defective or faulty answers; good form in answers; elliptical questions or answers; simultaneous answers; mistakes in dealing with answers; repeating answers; prompting by pupils or by teacher.

Illustrations: Their office and value; two divisions: those appealing to the senses, those given in words; making collections of objects; value of school museums, pictures, models, diagrams, charts, etc.; effective use of blackboards; how to use illustrations to the best advantage; wrong use; considerations of class, subject, etc.

(5) *The Teacher.*

Natural qualifications of a good teacher; importance of scholarship, of training, of experience, of professional studies, of wide culture, of Teachers' Associations, etc.

The teacher's relations with the Principal, the Inspector, trustees, parents; his civic and social duties; his personal power and influence in the school, in the community; his daily preparation for teaching; correcting written exercises; care of health.

(6) *School-room Routine.*

Advantages and disadvantages of mechanizing routine; order in entering and leaving the room, in passing to the class or to the board; distributing and collecting wraps; distributing and collecting books and material; neatness of written exercises and board work; keeping desks and room tidy; a system of signals; fire drill; teacher's supervision; appointment of monitors.

(7) *Desirable School Habits.*

Regularity of attendance, how to encourage it, what should excuse absence; relation between home and school; training to habits of punctuality; neatness in person and in work; accuracy—its value, relation to moral training, how to secure it; quietness, dealing with talking, whispering, noise in school, etc.; industry, what it involves, training in it; obedience, its necessity, to be given cheerfully, securing automatic obedience.

(8) *School Incentives.*

Meaning and office; effects on character, on school work, on health; kinds of incentives, those appealing to emulation, social instincts and sense of honour and duty; value and use of the chief incentives; fear as an incentive; competitive examinations; prize-giving; marking and grading pupils; school reports to parents; public examinations and exhibition of pupils' work; creating a good school tone.

(9) *Order and Discipline.*

What is meant by good order; providing for the well-being of the whole school; authority essential for effective discipline; the chief elements of governing power; relation of right physical conditions; other helpful factors, teacher's voice, keeping pupils busy, mechanized routine; rules, their value and enforcement; common faults and how to avoid them; discussion of methods of dealing with infractions of law; substitution *vs.* repression; co-operation of school and home.

Punishment: Ends and necessity; right conditions; characteristics of judicious punishment; injudicious punishments, kinds and results of; the discipline of consequences; corporal punishment; suspending or expelling pupils; dealing with incorrigibles; punishing and school studies.

(10) *Morals and Manners.*

Importance in a scheme of education; character-building, the chief object of education; cultivating right feelings; training the moral judgment; discipline as an aid to moral training; the teacher's personal influence; importance of individual teaching; the child's susceptibility and initiativeness; relations of habit and character; formation of desirable habits

in school; how best to deal with the various temperaments and dispositions; giving pupils right motives for conduct; moral value of certain school studies; the method and spirit of the teaching; manners and social etiquette. Religious teaching in schools.

(11) *Physical Education.*

Relations of physical and intellectual development; importance of change of work; value of plays and games; organized or unorganized play; dangerous plays or games; the teacher on the play-ground; physical exercise within the school; care of delicate children; co-education on the play-ground. (See under Personal Hygiene, p. 31.)

(12) *The School Building and Premises and School Hygiene.*

The Grounds: Situation, aspect, area, drainage, ornamentation, protection, care of school gardens; water supply, its sources. impurities, modes of purification.

The Outbuildings: Location and structure, necessity for supervision.

The School House: School architecture, size, shape, and suitability of rooms, hall, etc., importance of proper lighting; how to secure proper lighting, position of pupils with reference to windows; heating, warming by stoves, by hot air, by hot water, by steam, the advantages and disadvantages of each method, the jacketed stove; the themometer, the hygrometer; fire escapes and like appliances; ventilation; necessity for good ventilation; signs of vitiated air, moistening of air, quantity of fresh air needed, different methods of ventilation; furniture and equipment; desks and seats; necessity of adjusting the height to the pupil; blackboards, their size, situation, and kinds; cloak rooms and clothing; maps, globes, library, and other necessary apparatus and equipment; pictures and decorations of walls. (See Departmental Circular, No. 33, and under Hygiene, p. 31.)

Books of Reference

Landon's *Principles and Practice of Teaching and School Management.*
Dutton's School Management.
Bagley's Classroom Management.

Special Methodology.

16. The courses in Special Methodology prepare the teachers-in-training for intelligently observing and teaching lessons in all grades of the Model Schools, by enabling them to apply the principles of education and, in particular, to adapt to the work in each subject the principles of general methods. The chief object of education is the formation of character; this object is kept continually in view, and, in addition, the necessity for providing mental discipline and suitable preparation for the duties of life. The work in the special methodology of each subject is introduced by a few lessons of a general character, embracing the application of the general principles of method to the teaching of the subject. These introductory lessons are followed by a series of a more detailed character, dealing with:

(1) The selection and the organization of material for the grades taken in order, from the standpoint of presentation to the pupil and in terms of the Public School programme of studies.

(2) The discussion of special methods of instruction, concurrent with the academic review of the subject matter.

Book of Reference.

McMurry's Texts in Special Methods.

The following outlines deal with each subject of the Public School Course from its special pedagogical point of view:

I. *Language and Composition.*

The special aim of the course in Language and Composition is to prepare the teacher to train his pupils to speak and to write good English as a fixed, unconscious habit. The course includes the following topics:—

The paramount importance of language training; an adequate knowledge of the mother-tongue the foundation of education; the value of clearness, force, and grace of expression.

The nature of language and the connection between language and thought; the proper order in language training. to observe to think, to express; every lesson a means of training in language, much of the best language training incidental; the habit of speaking and writing good English to be formed unconsciously by reading good literature and associating with those who speak good English, also by teacher's critical oversight; the influence of the teacher's own language and the importance of libraries for supplementary reading; the influences opposed to good usage; common faults and how to deal with them: steady, unremitting attention by the teacher in the school and in the play-ground essential; criticism by pupils and teachers, its value and dangers; how to make pupils self-critical

Composition of two kinds: Oral and Written; both to be taught in class answers and in a systematic series of special exercises; oral throughout, written also as soon as pupil has attained proficiency in the mechanics of writing; materials for both kinds; the pupil's own experience, his imagination, conversations, directed observation, pictures; the reproduction of fairy and folk stories, poems, biographies, etc.; the content of lesson to be of worth and of interest to the pupils; relative value of reading and telling stories, etc., for reproduction; encouraging the pupil's free, natural expression; extending his vocabulary; value of memorizing poetry and prose; how to memorize.

The weakness of teaching mere formal linguistic exercises; the utilization, in the early stages of oral composition, of language in connection with nature study, literature, history, art, etc.; in school games; familiar talks to encourage freedom and fluency in speech; repetition of folk songs and rhymes which have a vocabulary and idiom similar to those of ordinary speech; reproduction of narrative and dramatic prose.

Connection between oral and written composition, value of their combination in the same lesson; written composition: when to introduce; the value of transcription, paraphrasing, transposition, change of construction, interchange of direct and indirect narration, grammatical equivalents; sentence and paragraph structure; use of models; the comopsition; the choice of topics: gathering, selecting, and arranging material, the value of topical outlines; paragraph compositions; the arrangement of paragraphs in a composition: order and method of teaching narrative and description; letter-writing with special attention to form and style.

The mechanics of written composition: The use of capitals, punctuation, and quotation marks, abbreviations, etc.

Lesson procedure: Planning the composition; use of the blackboard; compositions written in school, supervision and aid during writing; homework, how to provide therefor; how to correct school and home compositions; the value of re-writing.

II. *Reading.*

The special object of the course in Reading is to prepare the teacher to train his pupils to get the writer's thoughts and feeling (*intelligent* reading) and to communicate them to the listener so that he may appreciate them (*intelligible* reading). The course includes the following topics:—

The pupil's ability to interpret words limited by his experience; the preparation he has already; relation of idea, sound, and printed symbols; the formation of accurate visual and auditory impressions; constant necessity for connecting the printed symbol directly with the idea; reviews; interpretative reading; expression as conditioned by the thought and the presence of the person to whom it is addressed; criticism by teachers and by pupils; function and value of model reading, silent reading, sight reading, dramatic reading, elocution, declamation; devices for securing rapid word recognition; the pupil's use of dictionary; common faults on the part of both pupil and teacher and how to correct them; importance of training in reading and the principles of vocal expression to pupil's ordinary speech and general culture.

(1) The first stage deals with the sentence, word, phonic, alphabetical methods; their advantages and disadvantages; advantages of a combination of methods; criticism of devices that fix attention upon word forms rather than thought; drill on troublesome words at periods apart from the reading exercise; use of script or print at the first, transition from script to print; use of blackboard; the picture and its uses; seat exercises.

The second stage deals with reading for thought and pleasure with some freedom; use of primers, blackboards, and supplementary readers; increased attention to expression; value of imitative reading at this stage; training the ear to the beauty of language through the rhythm and music of poetry; drill in troublesome words and rapid word recognition.

The objects of the advanced stage are to give the pupil the power to communicate in an effective and pleasing manner the thoughts which he has been trained to extract for himself from the printed page; to create and foster a taste for good literature.

(2) Principles of vocal expression: Time, reflection, pitch, force, quality, pause, phrasing, emphasis, stress—study of each with practical illustrations and much practice. Exercise for rendering the organs of speech subservient to the will—vocalization, articulation, breathing, development of chest and lungs, mouth training for pure tone; diagnosis and treatment of defects and impediments of speech.

III. *Spelling.*

The special object of the course in Spelling is to prepare the teacher to secure accuracy in the mechanism of written word-expression. The course (a short one) includes the following topics:—

The relation of spelling to other subjects; special relation to writing and reading; teaching spelling, not merely testing; incidental teaching; selection of material; right grouping of words; causes of bad spelling; relation of the age and mental status of pupils.

Appeals to the eye, to the ear, by training the muscular sense, separately or in combination; oral spelling, transcription, sight spelling, memory spelling, and word building, advantages and disadvantages of each; spelling rules, value, how taught; relation of the reading lesson to spelling words therein; use of the board, of the dictionary, of the spelling book; requirements on the part of the teacher.

Lesson procedure: Preparation for teaching, detection and correction of errors, re-writing; spelling drills and reviews; need of varying method.

IV. *Literature.*

The special object of the course in Literature is to prepare the teacher to create in his pupils a taste for good literature while broadening their knowledge, moulding their characters, and aiding them to appreciate the beauty and power of artistic expression of thought and feeling. The course includes the following topics:—

The nature and elements of literature; restricted meaning for elementary classes; importance of the study in the development of character; its value in the cultivation of the imagination and taste; main object the comprehension of the meaning; futility of attempts to develop formally the critical sense; correlation with the other subjects of the course.

Qualities of literature that appeal to children at different stages; paramount importance of selecting material suitable for the different stages of child life; the relative values of prose and poetry; complete wholes *versus* extracts; teacher's work with pupils to be oral at first; comparison of the values of reading and telling; pupils to read for themselves as soon as practicable; seat work and home work in literature; the study to be pleasurable, a fundamental condition; special importance of the teacher's own qualifications; intensive and extensive study; importance and method of memorizing selections; importance of the school library; how to secure the co-operation of the home.

Lesson Procedure: Preparation by pupils and teacher; from whole to part, then back to whole; purpose and suitability of the introduction; place of the author's biography; meaning of words, phrases and sentences, important only as parts of the whole; treatment of figures of speech, etc.; value of oral and written reproduction; importance of oral reading of selection after study thereof; difficulty of examining in literature; specimen examination questions.

Aids to Teaching: Lists of suitable fairy-tales, fables, nature-stories, poems, etc.; value of stories containing some dramatic action, some pleasing personality or incident; the basis of selection, the ends of the child's emotional nature.

A sessional reading course shall be arranged for each teacher-in-training; suggestions for his future reading.

V. *Grammar.*

The special object of the course in Grammar is to prepare the teacher to give the pupils a basis for self criticism in language by developing the principles of language structure, to secure precision of expression, and to train in habits of logical analysis. The course includes the following topics:

Meaning of English grammar; its relation to speech, composition, reading, and literature; the use and value of our remaining inflections; English grammar, the logic of English speech; reasons for and against retaining it in elementary schools; difficulties inherent in the subject; how to be begun; no systematic grammar lessons before Form IV; the important parts for elementary classes.

Principles to be observed in its teaching; basing it on the concrete; the sentence, the starting point; basal value of function; order and method of early lessons; value of correct definitions—how to be obtained, how to be applied; analysis and parsing, aim and value of each; methods of teaching;

diagrams; importance of classification; oral and written exercises, drills; value of false syntax; common mistakes in teaching; outline in order of the indispensable portions of the subject.

VI. *History.*

The special object of a course in History is to prepare the teacher to train pupils to adapt human experiences to present situations. In the elementary stages the chief object is to arouse an interest in historical studies; also to create a love for country. The course includes the following topics:—

Selection and arrangement of suitable material for the different grades, such as biographies, customs and habits of people, history of aborigines and pioneers, historical epochs, characteristics of nations, beginnings of governments, histories of industries, etc.; the correlation of history with geography, reading, and literature; ballads, orations, epics, legends and tales of chivalry, narrative poems, historical novels; the history and significance of the flag.

Topical and chronological methods compared; three stages of historical teaching: picture and story stage, the information stage, the intellectual stage; importance of developing interest; the place and value of local history; value of Canadian history and of British history since the Elizabethan period; aids and illustrations; value of civics in the different grades; how to use text books; the character of supplementary books suited to pupils of different grades; mnemonics.

Importance of preparation by the teacher; preparation by pupils; oral and written recitations; the lecture method in combination with work by pupils; use of maps, blackboards, etc.

Errors to be avoided in teaching history: Trivial events that have no general significance, full chronologies, genealogies of kings, enlarged descriptions of military campaigns, etc.; dangerous discussion of religious movements and of recent and contemporary history; the giving of condensed notes or epitomized statements, etc.

VII. *Geography.*

The special object of the study of Geography is to prepare the teacher to show man's place in the world and to extend his control over the forces of nature. This subject and Nature Study and Elementary Science occupy a fundamental position in the course of studies; a knowledge of them enables man to interpret new experiences, to understand the experiences of others, and to adapt himself to new conditions. The course includes the following topics:—

A review from the pedagogical standpoint of the study of the earth's surface and the changes wrought thereon by various agencies, of the earth's relation to other heavenly bodies (astronomy), of the weather and climate (meteorology), of its plant and animal life (biology), of its mineral products (mineralogy), of its rock-formations (geology), and, above all, of man's relation to the rest of the world (commercial and political); also mathematical geography.

Methods: Fundamental principles; causes and effects; the analytic, synthetic; inductive, deductive, topical and other methods, advantages and disadvantages of each; common mistakes and how to avoid them; study begins with home locality and extends therefrom; proper use of maps and globes; scales of maps and projections; right order of topics in teaching a

country or continent; danger of too great detail; relation to history; special importance of preparation by the teacher.

Aids to Teaching: Maps, globes, pictures, blackboard drawing, natural objects, specimens of products, lantern slides, stereopticon views; representation through modelling and through map-drawing; weather observations and records; simple geographical experiments; geographical excursions, value and management; inter-school correspondence; value of reference library, books of travel, etc.

VIII. *Nature Study and School Gardens.*

The object of Nature Study is the same as in Geography, with, in addition, the development of sympathy for those plants and animals that are beneficial to mankind. It is the foundation of Geography, dealing with the phenomena with which children have personal experience during school life. The school garden should be the centre of the work.

The pedagogical value of Nature Study is fourfold: (1) It develops the senses; (2) through the senses, it furnishes material for the development of the thinking powers; (3) through the gardening activities it develops, not only the physical powers, but also by co-operation and ownership, the social sense; (4) it is closely related to Art, Manual Training, Composition, Literature, and Arithmetic, making these subjects more interesting and profitable.

(1) The course includes the following topics:—

(*a*) The pedagogical views of the subject, including the character and scope of Nature Study, its adaptability to the tendencies and needs of the child, the special purposes to be kept in view in the treatment of the subject, and the general method of presentation.

(*b*) The study of special topics dealing with the materials of Nature Study and illustrating methods of presentation in all grades of the Public School. These topics should be typical and should be selected from the various grades and departments of the Public School course of Nature Study.

(*c*) Discussion of the bases for the selection of material suitable for each of the Public School grades, including outlines worked out for these grades; supplementary materials, such as stories, literature collections, etc.

Frequent excursions should be made to available localities where materials may be studied in their natural environments and relations.

(2) Students should be required to make collections of different kinds for their own extended observation and study, and to enable them to direct as teachers the practical side of nature work. The nature of the collections will be regulated by the kind of school in which the student will likely teach; rural teachers should make collections of weeds, weed seeds, economic plants, plant diseases, injurious and beneficial insects, etc.; urban teachers, of factory products, garden flowers, etc.

(3) The subject of School Gardening should be dealt with as a part of the general Nature Study course, and presented in three main divisions:

(*a*) The pedagogical views of the subject as under Nature Study above; its relation to home gardening.

(*b*) Class-room work: Exercises and lessons showing the use of garden practice and knowledge in the subjects of Art, Literature, Arithmetic, Agriculture, etc.; discussion of organization, equipment, school gardening associations, etc.

(*c*) Practical: Practice in planning and plotting a garden; visits to schools to see children at work; planning school grounds for tree planting in accordance with the principles of landscape gardening; preparation and planting of experimental plots in the school grounds to illustrate the benefits of rotation, fertilizing, spraying, mulching, etc.; visits to adjacent farms where experiments under the direction of the Ontario Agricultural and Experimental Union may be seen.

Books of Reference.

Agriculture and Horticulture in Rural and Village Public Schools and School Gardens. (Departmental Circular, No. 13.)
Hodge's Nature Study and Life.
Dearness' How to Teach Nature Study.
Silcox and Stevenson's Nature Study.

IX. *Elementary Science.*

The object of the course in Elementary Science is the more systematic and scientific study of natural and physical phenomena than is attempted in connection with the more general and elementary department of Nature Study. The course includes:—

A comprehensive and practical review of the course in Elementary Science prescribed for the Fifth Form of the Public School with the purpose of acquiring a more accurate knowledge of facts and a more definite grasp and appreciation of general principles. This review should be carried on through both class-room discussions and laboratory work, with the emphasis on the laboratory side. Students should become familiar with methods of experimentation and should attain skill in instrumental manipulation. They should also be required to keep neat and accurate records of all observations and experimental work.

Methods of teaching the Natural and Physical Sciences: The meaning and value of observation and experimentation, the relation of inductive to deductive methods of investigation, the place of class-room discussion, demonstration by the teacher, laboratory work by the pupil, the use of note-books and text-books.

The construction of simple apparatus. (See Manual Training course.)

NOTE.—In both the Nature Study and the Elementary Science course the subject matter of the Biology receives more attention than that of the Physics and Chemistry, which are subjects of the July Entrance Examination.

X. *Arithmetic.*

The special object of the course in Arithmetic is to prepare the teacher to familiarize his pupils with the processes of arithmetic, so that they may apply them readily and accurately in making such calculations as their future life may render necessary; also to employ it effectively as a means of logical training. The course includes the following topics:—

Inductive and deductive methods of treatment, their relation, the use of text books and of the prescribed apparatus; the importance of training in accuracy and speed in computation; danger of over-emphasizing the value of arithmetic as a means of logical training.

Origin and Nature of Number: The history of the development of arithmetic; the nature of number; the origin of number as a result of the

necessity for the valuation or limitation of quantity by measurement; the unit—its nature and use.

Arithmetical Operations: Counting; concrete objects used; measuring with standard units; numbers from 1 to 10; from 10 to 20, etc.; number pictures; notation and numeration; addition—tables, grading of exercises, devices to secure accuracy and rapidity; subtraction—by decomposition, by equal additions, by complementary additions; multiplication—relation to and difference from addition, tables, grading of exercises, factors; division—relation to multiplication and subtraction, short division, long division, factoring, division by factors; cancellation; measure; multiples.

Fractions: Notation, different interpretations thereof; how and when to be introduced; rules for operations deduced and applied; decimal fractions—correspondence of methods of numeration, notation, and operations with those of integers; recurring decimals.

Applied Arithmetic: (*a*) Oral arithmetic, its importance, place and use.

(*b*) Problems, their value, essentials of proper solutions; the "unitary method" discussed.

(*c*) Method of teaching and applying percentage, trade discount, commission, insurance, taxes, interest, discount, stocks, exchange; table of weights and measures; the metric system; mensuration, including (*a*) the areas of the rectangle, the triangle, the parallelogram, and the circle, and (*b*) the volume of the rectangular solid, the cylinder and the prism; square root.

XI. *Algebra.*

The special object of the course in Algebra is the same as that in arithmetic, having regard to the fact that algebra is arithmetic generalized. The course (a short one) includes the following topics:

When and how to be introduced; its nature and scope; its relation to arithmetic; a comparison of the nature and application of its symbols and operations with those of arithmetic; the equation as a means of connecting the subject with arithmetic and of introducing its symbols; the origin and explanation of algebraical symbols.

The use of induction, deduction, and mathematical induction in algebra.

Methods of teaching algebraic notation, addition, subtraction, multiplication, division, formulæ, factoring, measures, multiples, fractions.

The equation—its nature; identities; the solution of equations of one and of two unknowns, and of easy quadratics; the mathematical axioms employed in these solutions; the interpretation of results; the equation applied to the solution of problems; comparison, where possible, of algebraic and arithmetical solutions.

Testing algebraic operations by "checking;" application of algebra to geometry; simple graphs.

XII. *Geometry.*

The special object of the course in Geometry is to enable the teacher to train the reasoning powers of his pupils by inductive and deductive processes. The course (a short one) includes the following topics:

The nature and scope of the subject; the history of the development of geometry; when geometry should be begun; methods of treatment—inductive and deductive; the relation of inductive geometry to deductive geometry; the inductive course for beginners.

Method of introducing the definitions.

The use of simple instruments, compasses, protractor, divider and set square, in the measurement of lines and angles; the construction of lines and angles of given magnitude and the construction of geometrical figures.

The inductive method of proving some of the leading propositions of Euclid, through the accurate construction of figures; the deductive application of principles as they are reached through induction.

Throughout the course, accuracy in construction to be insisted upon as co-ordinate with exactness of thought.

XIII. *Writing and Bookkeeping.*

The pupil should write with ease a good, legible hand. To secure this end the teacher-in-training himself requires adequate instruction and practice as well as a concurrent course in methodology. The course (a short one) includes the following:

Historic methods of teaching writing; copying methods; constructive methods; styles of writing in use at different periods.

Penholding; position at the desk; position of the paper; the proper formation of the small and the capital letters; the proper formation of the figures; continued practice from the beginning in the various movement exercises, to ensure an easy and free motion in writing.

Writing taught with reading, the making of the figures with arithmetic; use of headlines and of copybooks; use of blank paper; its ruling; value of transcription, dictation, and composition in teaching writing: use of the blackboard to teach the correct form of each letter singly and in combination; how general and individual faults are corrected; the formation of a characteristic hand; how to deal with pupils having some physical disability.

After the teacher-in-training has mastered in class the proper formation of the letters, etc., and the movement exercises, the teacher requires him to hand in from time to time exrcises for criticism until his handwriting is satisfactory.

A brief review of the Lower School course in Bookkeeping, also affording practice in writing.

XIV. *Art Work.*

The fundamental principle to be kept in view in the Art course is that, besides being a means of æsthetic culture, Art Work is a mode of expression and is of great value in other subjects of the course. The teacher is prepared accordingly. The Art Work should be closely connected with Nature Study, Geography, Literature, Manual Training, etc. The course includes the following topics:

(1) *Representation.*

Freehand Drawing: How to use the various mediums, pencil, charcoal, crayons, ink with pen or brush; the drawing of common flat objects such as leaves, grasses, brooms, shovels, saws, hammers in an appropriate medium; the drawing of common spherical, cylindrical, and rectangular solids, illustrating the principles of freehand perspective; the grouping of objects; simple landscapes from nature and imagination; illustration of games, occupations, nursery rhymes and stories; pose drawing; drawing from casts.

Blackboard Drawing: The use of white, black, and coloured crayons on the blackboard and on large pieces of paper; rapid illustrative sketches to aid in the teaching of all subjects; blackboard drawing specially important to the teacher.

(2) *Water Colours.*

Theory of Colour: The solar spectrum; the six standard colours, red, orange, yellow, green, blue, and violet; the intermediate hues, red-orange, yellow-orange, yellow-green, blue-green, blue-violet and red-violet; the tints and shades of each colour in graduated scales; the pigmentary theory; primary, secondary, and tertiary colours; complementary colours; colour harmony; dominant, analogous, and complementary; the neutral value scale.

Practice: The making and applying of graduated and uniform washes; the representation in colour, neutral values, and sepia, of leaves, grasses, flowers, fruits, trees, insects, pet animals, birds and common objects; the grouping of objects; simple landscapes from nature and imagination; elementary composition of pictures.

(3) *Decorative Design.*

The principles that determine the rhythm, balance, and harmony of tones, measures, and shapes; borders, surface designs, designing of Christmas cards, programmes, book covers; lettering; designs to be done in neutral value first and then carried out in colour.

(4) A short course outlining the development of architecture and ornament, to be taken up in four lectures illustrated with pictures and lantern slides.

How to study a picture; the critical study of a few masterpieces of painting.

Book of Reference.

Text-books of Art Education; 8 books; The Prang Educational Co., Boston.

XV. *Manual Training.*

The special object of the course in Manual Training is to prepare the teacher to make all his work more permanent and valuable by introducing systematically the element of motor activity, a necessary factor in mental development. It also develops industrial intelligence and a general appreciation of beauty and excellence, besides having an important practical value. The course includes the following topics:

The importance of motivation and correlation in hand-work; a discussion of the ways in which materials and operations may be made to meet the demands and needs of the child in the different grades of Rural and Urban Schools; the principle of the selection of exercises based on the requirements of the school and the home; outlines of courses in the different forms of hand-work. The practical course includes the following with concurrent methodology:

(1) Drawing: Use of drawing instruments; a short course in mechanical drawing with and without instruments; making blue prints.

(2) Paper and Cardboard Work: Paper folding and cutting; bookbinding, simple repair of books; trimming and mounting of pictures.

(3) Modelling: Materials used for modelling and how these are kept; modelling natural forms; plotting; modelling as a means of teaching geographical concepts; supplementing observation of the topography of school neighborhood; supplementing word pictures in readers, etc.; models used in conjunction with drawing, etc., in teaching principles of design.

(4) Woodwork: Tools and how to keep them in good working order; designing; a short course in bench work; uses of woods and their suitability to such uses; methods of wood finishing.

The construction of simple forms of school apparatus in wood, metal, glass, and their combinations.

Co-operative exercises in the above forms of work.

XVI. *Household Science.*

The pedagogical object of the course in Household Science is largely the same as that of the Manual Training course, of which it is a form, the practical value being, however, different. The course includes the following topics, with concurrent methodology:

(1) The Home: Purpose; use, furnishing, and care of each room; methods of cleaning; ventilation.

(2) Foods: Elements of foods required by the body; digestion of these; analysis of common foods—milk, eggs, meat, fruit, vegetables, cereals; effect of heat on these as to food value, digestibility, and flavour.

(3) Cookery: Principles of combustion: care of stoves; fuels; principles and practice of each method of cooking—boiling, simmering, steaming, steeping, toasting, broiling, frying, baking, etc.; food combinations· flour mixtures; lightening agents used in these; table service.

(4) Bacteriology: Occurrence and nature of bacteria; sanitation based on this knowledge; preservation of foods.

(5) Needle Work: A study of each stitch on different textures and fabrics: application of these in making simple articles, as bags, aprons, handkerchiefs, needle-cases, towels, etc.; mending, darning, patching, using different textures and fabrics; button-hole making, sewing on buttons, hooks and eyes; colour combinations; taking measurements and drafting patterns; making dolls' clothes; making simple garments and underclothing.

XVII. *Music.*

Music is a means of self-expression and of cultivating taste. The teacher is prepared accordingly. The course includes the following topics:

(1) Tune: Practice in singing from the Staff and Tonic-Solfa modulators: intervals of average difficulty, contained in the Major diatonic scales; modulation from any given key to its attendant keys, viz.: its Relative Minor, and its Dominant and Subdominant, with their Relative Minors.

(2) Time: Practice in singing rhythmical studies in simple or compound Duple, Triple, or Quadruple times; the pulse as the unit of measurement in time, with its divisions into halves, quarters, or thirds in varied combination.

(3) Ear Training: Development of the power to recognize by ear, and to transcribe the tonal and rhythmic of short musical phrases, when sung or played.

(4) Voice Culture: Practice in correct tone production; vowel formation; enunciation of consonants; breath control; correct intonation; and the equalization of the various registers of the voice.

(5) Songs: The study of songs suited to the requirements of pupils in all grades of Public and Separate Schools, with special attention to development of power in musical expression; the study of part songs of recognized merit, arranged for adult voices.

(6) Notation: Elements of notation, both Staff and Tonic-Solfa; the formation of the Major and Minor diatonic scales; elements of modulation

and transposition; analytical study of the elements of musical Form, from the simple phrase to the complete sentence.

(7) Vocal Physiology: Comparison of abdominal, intercostal, and clavicular breathing; the larynx; action of the vocal chords in the production of the various vocal registers; influence of the mouth and nasal cavities on vocal resonance and vowel quality.

(8) Methods: The application of pedagogical principles to the teaching of music in schools is made systematically, and a practical knowledge of recognized systems of teaching the Staff and Tonic-Solfa notations is acquired; also of the relative importance of the Staff and Tonic-Solfa systems in school music teaching, and the grading of musical studies concurrently with the foregoing course.

XVIII. *Physiology, Hygiene, and First Aid.*

The object of these courses is to enable the teacher to care for his own and his pupils' health and to develop in the community right notions of the conditions of health.

(1) *School Hygiene.*

Air and Ventilation. (See School Management.)

Contagious and Infectious Diseases: Common facts of bacteriology, how to detect existence of common infectious and contagious diseases; modes of preventing spread of these diseases; duty of the teacher. Spinal curvature; adaptation of seats and desks; school architecture; grounds and furnishings. Fire escapes and fire appliances, fire drill. (See also School Management.)

(2) *Personal Hygiene.*

Definition and objects of hygiene.

The framework of the body.

Physiology of respiration and circulation.

Digestive system: Foods; care of the teeth.

Temperance: Effects of alcohol, tobacco, etc.

Physical exercise and measurements, abuse of exercise, record breaking, over-strain, etc.

Mental exercise; study; rules regarding mental work, irregular and overwork, mental strain and worry, neurasthenia.

Bathing; clothing, cloak-rooms.

The eye: Its physiology and hygiene; lighting; myopia, and presbyopia; affections produced by improper accommodation; colour blindness; the blackboard tests for defective eyesight.

The ear and throat: Physiology and hygiene of the ear, the nose, the throat and voice; ear and throat troubles causing dullness in pupils; tests for defective hearing and breathing.

(3) *First Aid.*

Accidents and emergencies until the doctor comes; fainting, suffocation, drowning, hemorrhage, fractures and dislocations, venomous stings, poisoning, frost-bites, sunstroke and heat-stroke, burns, bandaging.

(4) *Sanitary Legislation.*

Public health; duties of teachers.

Book of Reference:

Knight's Introductory Physiology and Hygiene.

XIX. *Physical Culture.*

The special object of the course in Physical Culture is to enable the teacher to make proper provision for the physical training of the pupils. It includes, as a basis, Physiology and Hygiene (School and Personal). It pre-

scribes and directs rational forms of exercises for the attainment and maintenance of health, the development of a symmetrical body, and the formation of habits of grace and ease in muscular movement. To this end the teacher-in-training should be made familiar with the German, Swedish, French (Delsarte), and American systems of physical training. The course includes:

Breathing exercises; running, hopping, quick walking.

Leg exercises: Standing positions, fundamental stride, etc.; standing with flexions of ankle and knee; fall-outs; charges; fencing positions and kneelings.

Arm exercises: Starting position hands at side, at shoulders, at thrust, at upward bend, at formal bend; movements of raising, swinging, rotation, circling, flexion, and intension.

Neck and trunk exercises: Flexion, extension, and rotation.

Free exercises: All the simpler forms from fundamental positions; also compound movements of two parts in the same, opposite and right-angled directions.

Tactics: Facings and steppings; marching in various formations of rank, file, column, etc.; fancy steps, follow and change steps, etc.; running.

Special exercises for correcting the individual effects that may be found among children.

Recreative gymnastics, or gymnastic games; indoor and outdoor games.

XX. *School Law and Regulations.*

The Ontario School Law and Regulations so far as they deal with the duties and obligations of teachers and pupils (a short course).

XXI. *Morals and Manners.*

The special object of the course in Morals and Manners is to enable the teacher to deal with the courses in these subjects in the school programme, the immediate object of which is the formation of character, including proper conduct towards others. The course (a short one) includes the following topics:

(1) Morals: Duties to oneself; purity, health, honour; self-control, self-reliance, generosity, truthfulness, good taste, cultivation of will power, economy, moral value of work, etc.; duties in school: punctuality, neatness, order, etc.; duties in the home: respect for parents, consideration for other relatives, the weak, the aged, etc.; duty to others generally: honesty, courtesy, charity, toleration, justice, etc.; duties to the lower animals: kindness, etc.; duties to our country: patriotism, obedience to law, etc.

(2) Manners: At home, at school, in the street, in public places, etc.

Provincial Model Schools.

17.—(1) The terms of the Provincial Model Schools shall correspond with those of the Public Schools in cities. The hours of study shall be from 9.30 a.m. to 12 m., and from 1.30 p.m. to 3.30 p.m., unless otherwise determined by the Principal The regulations of the Education Department with regard to pupils and teachers in Public Schools shall apply to the teaching staff and to pupils of the Model Schools, subject to any modifications that may be made from time to time by the Minister of Education.

(2) The Head Master of each Model School and the Director of the Provincial Kindergarten shall act under the direction of the Principal of the Normal School to which their respective departments are attached, and shall

be responsible to him for the order, discipline and progress of the pupils, and also for the accuracy and usefulness of the lessons conducted by the teachers-in-training.

The Kindergarten.

18.—(1) No person shall be appointed to take charge of a Kindergarten in which assistant teachers or teachers-in-training are employed, who has not passed the examination prescribed for a Director of Kindergartens; and no person shall be paid a salary or allowance for teaching under a Director who has not passed the examination prescribed for assistant teachers. No person shall be admitted to the course of training prescribed for assistants who is not seventeen years of age and who has not Junior Leaving standing, or who has not spent at least three years in a High School. Any person who has taken the equivalent of such a course at some other educational institution may, on the recommendation of the Inspector, be admitted to training with the consent of the Minister of Education. No person shall be admitted to the course prescribed for a Director unless such person has obtained an Assistant's certificate. (Reg. 54.)

(2) Any person who attends a Kindergarten for one year and passes the examinations prescribed by the Education Department shall be entitled to an Assistant's certificate. The holder of an Assistant's certificate, or the holder of a Second Class Provincial certificate shall, on attending a Provincial Kindergarten one year and on passing the prescribed examinations, be entitled to a Director's certificate. (Reg. 55.)

(3) The examination of Directors shall include Psychology and the General Principles of Froebel's System; History of Education; Theory and Practice of the Gifts and Occupations; Mutter and Kose-Lieder; Botany and Natural History; Miscellaneous Topics, including discipline and methods of morning talks, each 100; Practical Teaching, 500: Book-work, 400. There shall also be a sessional examination in Music, Drawing and Physical Culture to be reported by the Principal to the examiners at the final examination. The examination for Assistants shall include the Theory and Practice of the Gifts (two papers); Theory and Practice of the Occupations (one paper); Miscellaneous Topics, including the general principles of Froebel's system and their application to songs and games; Elementary Science, morning talks and discipline (one paper), each paper, 100; Book-work, 400. Any Director sending up candidates to the examination for Assistants' certificates shall certify that the Pease-work and Modelling have been satisfactorily completed. (Reg. 56.)

NOTE.—The Kindergarten Courses and Regulations will be amended before next session.

December, 1907.

Syllabus of the Professional Summer School, 1908, Second Session, Normal School Standard for Members of the Roman Catholic Religious Communities under Section 4 of "An Act respecting the Qualifications of Certain Teachers," of 1907, and for holders of Permanent Third Class Public School Certificates.

[Circular No. 61 (2).]

Prefatory Memorandum.

I. Application for admission to this Summer School must be made on or before March 1st, 1908. As soon as possible thereafter, the locality of the school will be announced. The session will begin on Monday, July 6th, at 2 p.m., and end on Wednesday, August 5th.

II. Into this school will be admitted the following:

(*a*) Members of the Roman Catholic Religious Communities under section 4 of "An Act respecting the Qualifications of Certain Teachers," of 1907.

(*b*) Holders of permanent Third Class Certificates, whether Public or Separate School teachers, in accordance with the following regulation: "The Minister of Education may grant Second Class Interim Certificates to holders of permanent professional Third Class Certificates who attend the course and pass the final examination of the professional Summer School, of Normal School standard, to be held in 1908, who also pass the final examinations in Groups I. and II. and an examination in the subjects of Group III. of the Normal Schools, and whose success and ability as teachers have been certified to, before they attend the Summer School, by the Inspector under whom they last taught."

Candidates for Second Class Certificates under the foregoing regulation who are actually engaged in teaching may take the Normal School examinations in Groups I., II. and III. in the same year or in different years. If taken in different years, candidates must make 40 per cent. of the marks for each subject and 60 per cent. of the total in the group or groups so taken. (See Normal School Syllabus of Studies.)

(*c*) A limited number of other applicants who desire merely to improve their professional qualifications.

III. The staff of this Summer School will assume as follows:

(*a*) That each teacher-in-training has studied carefully at least those portions of the books recommended for reference, which treat of the topics enumerated in the following courses in the Science of Education, the History of Education, and School Organization and Management.

(*b*) That the academic work in each subject taken up under Special Methodology, below, has been carefully reviewed by each teacher-in-training.

(*c*) That the professional work of the Model Schools or the Summer School of 1907, as the case may be, has been carefully reviewed.

IV. For certain of the subjects in the Public School Programme of Studies, no provision has been made under Special Methodology in this Summer School course. Summer Schools, open to all, are held each year, in most of these subjects, at the Ontario Agricultural College, Guelph, and the University of Toronto. If a sufficient number apply, a Special Summer School in Art, Nature Study, Science, and Manual Training, will be held at Toronto in 1909, for members of the Roman Catholic Religious Communities who teach in the Separate Schools.

The Science of Education.

The object of a course in the Science of Education is to provide the teacher with a working conception of the nature of education which will be useful to him in forming ideals and determining procedure, to give him a rational basis for intelligently evaluating and selecting subject matter and methods of instruction, and to improve natural tact and skill through the acquisition of experience, with the least expenditure of time and energy. The present course includes Applied Psychology, Child Study, and General Methodology.

Introduction. (Three lessons.)

(1) *The Aim of Education*: Stated in its most general terms; statement and criticism of the chief current definitions of education; individual and social phases of education.

(2) *The Function of the School in Education*: Its relation to the other social institutions, the home, the church, the state, the vocation.

I. *Applied Psychology.* (Twenty lessons.)

Special attention shall be given to the pedagogical conclusions to be derived from the psychological principles considered. The course, which is intended to be a simple and practical one, shall include the discussion of the following topics:

(1) *Psychology*: Field of psychology; methods of psychological enquiry; the use of psychology to the teacher.

(2) *Habit*: Automatic and reflex action; primary instincts; development of reflexes; formation of habits and the development of motor control; the relation of habit to will; the intellectual and ethical aspects of habit.

(3) *Attention*: Nature of attention as a process; conditions of attention; forms of attention; discrimination; association; interest, its nature and relation to attention; methods of securing and retaining attention; obstacles to attention.

(4) *Apperception and Retention*: Meaning of the terms; their relation; mental assimilation, growth and development.

(5) *Sensation*: Distinctive characteristics of sensation; relation of sensation to knowledge; neural basis of sensation; classification of sensations.

(6) *Perception*: Distinctive characteristics of perception; genesis and development of perception; training of perception and formation of habits of observation.

(7) *Imagination*: Conditions of re-presentation; distinctive characteristics of imagination; relation of image to idea; mode of operation of imagination; reproductive imagination, productive imagination; training of imagination.

(8) *Memory*: Distinctive characteristics of memory; conditions of retention, recall, recognition; training and development of memory processes.

(9) *Conception*: Distinctive characteristics of conception; relation of concept and image; the function of language in the formation of concepts.

(10) *Judgment and Reasoning*: Distinctive characteristics of judgment; relation of concept and judgment; the distinctive characteristics of reasoning; training in judgment of reasoning.

(11) *Affective Elements of Consciousness*: Elementary forms of affection; affection in its relation to sensation, perception, imagination, memory, and reasoning.

(12) *Emotion*: Distinctive characteristics of emotion; conditions of emotional development; classification of emotions; training of emotions.

(13) *Development of the Will*: Impulsive and volitional acts distinguished; distinctive characteristics of volition; definition of character; means of character development.

Book of Reference.

Angell's *Psychology.*

II. *Child Study.* (Five lessons.)

Child Study enables the teacher-in-training to adapt intelligently his methods in each subject to the child's mind at the different stages of its growth. The course includes the following topics:

(1) The scope of Child Study; methods of investigation; importance to the teacher of the study of the child mind.

(2) Physical growth and development during infancy, childhood, and adolescence.

(3) Mental development during the above periods.

(4) Individual difference in children.

III. *General Methodology.* (Twenty-five lessons.)

The course in General Methodology forms a basis for the courses in Special Methodology. The course includes the following topics:

(1) *The Problem of General Method*: The relation of general method to special methods and to teaching devices; the relation of method to subject matter.

(2) *The Doctrine of Interest*: The relation of the child's interest to his native instincts and capacities; the relation of interest to self-activity; the use of interest in the school-room.

(3) *The Principle of Correlation*: Based on the unitary character of experience; illustrations of the use of the principle in school work; the theory of concentration or the grouping of all the subjects of the curriculum about a central one; examination of various plans for correlation and concentration.

(4) *Individual and General Notions*: Their relation to each other, the processes by which each is developed; the principle of apperception.

(5) *Impression and Expression*: Their interpendence; importance of this interdependence as the basis for the constructive side of school work; its bearing upon the development of character.

(6) *Types of Recitation*: The development lesson, the drill lesson, the review lesson, etc.; mental processes involved in each; value of each type.

(7) *The Plan of the Recitation*: Adjustment to the needs and the capacities of the pupils; relation to previous work; statement and criticism of the "five formal steps" of the Herbartians.

(8) *Teaching Devices*: Use of questioning in the development of individual and general notions; right and wrong methods of questioning; examination of the so-called Socratic method; answers; qualities of a good answer; treatment of faulty answers; mistakes in dealing with answers; illustrations: their office and value; by objects and by words; use of the blackboard.

Book of Reference.

Bagley's *The Educative Process.*

Special Methodology. (Sixty lessons.)

The books to be studied as a preparation for and in connection with the following courses are those now in use in the Public and High Schools.

The courses, as defined below, contain both information and topics for discussion. To the latter the master shall devote most of his attention; and, owing to the short time at his disposal, he shall give directions and suggestions as to future work after he has dealt with general and essential principles. Occasionally, also, when he considers it judicious, he shall use the teachers-in-training as a class for illustrative purposes.

The object of the courses is to enable the teacher-in-training to adapt to the work in each subject the principles of General Method. All the work shall be done in terms of the Public School Programme of Studies.

Provision is made in the introduction for a discussion of the general aim of education. The special aim of each subject in the programme dealt with below is also stated in general terms. Such statements enable the teacher to evaluate and select details.

I. *Language and Composition.*

The special aim of the course in Language and Composition is to prepare the teacher to train his pupils to speak and to write good English as a fixed, unconscious habit. The course includes the following topics:

An adequate knowledge of the mother-tongue the foundation of education.

The nature of language, and the connection between language and thought; every lesson a means of training in language; much of the best language training incidental; the habit of speaking and writing good English to be formed unconsciously by reading good literature and associating with those who speak good English, also by the teacher's critical oversight; the influence of the teacher's own language and the importance of libraries for supplementary reading; the influences opposed to good usage; common faults and how to deal with them; steady, unremitting attention by the teacher in the school and in the play-ground essential; criticism by pupils and teachers, its value and dangers; how to make pupils self-critical.

Composition of two kinds: oral and written; both to be taught in class answers, and in a systematic series of special exercises; oral composition throughout; special utilization of oral work in the early stages, written as soon as the pupil has attained proficiency in the mechanics of writing; materials for both kinds; the content of lesson to be of worth and of interest to the pupils; familiar talks to encourage freedom and fluency in speech; the reproduction of fairy and folk stories, fables, poems, biographies, etc., which have a vocabulary and idiom similar to those of ordinary speech; relative value of reading and of telling stories, etc., for reproduction; use of imagination; transition from reproduction to originality; personal experiences, real and imaginary; stories from pictures; developing themes from minor incidents; extending the pupils' vocabulary; value of memorizing poetry and prose; comparative value of verse and prose; how to memorize.

Connection between oral and written composition; value of their combination in the same lesson; written sentence work; when to introduce it; aims to be kept in view; the value of transcription; paraphrasing, transposition, change of construction, interchange of direct and indirect narration, grammatical equivalents; paragraph compositions; the whole composition; the choice of topics; gathering, selecting, and arranging material; the value

of topical outlines; the arrangement of paragraphs in a composition; use of models; letter-writing with special attention to form and style.

How to teach the mechanics of written composition; capitals, punctuation and quotation marks, abbreviations, etc.

Lesson Procedure: Planning the composition; use of the blackboard; compositions written in school, supervision and aid during writing; homework, how to provide therefor; how to correct school and home compositions; the value of re-writing.

II. *Reading.*

The special object of the course in reading is to prepare the teacher to train his pupils to get the writer's thoughts and feelings (*intelligent* reading) and to communicate them to the listener so that he may appreciate them (*intelligible* reading). The course includes the following topics:

The pupil's ability to interpret words limited by his experience; his previous preparation; relation of idea, sound, and printed symbols; the formation of accurate visual and auditory impressions; constant necessity for connecting the printed symbol directly with the idea; interpretative reading; expression as conditioned by the thought and by the presence of the person to whom it is addressed; criticism by teachers and by pupils; function and value of model reading, silent reading, sight reading, dramatic reading, elocution, declamation; devices for securing rapid word recognition; devices for securing natural expression; the pupil's use of the dictionary; common faults on the part of both pupil and teacher and how to correct them; importance of training in reading and the principles of vocal expression to pupil's ordinary speech and general culture.

The first stage in teaching reading deals with the sentence, word, phonic, alphabetical methods; their advantages and disadvantages; importance of a combination of methods; criticism of devices that fix attention upon word forms rather than thought; drill on troublesome words at periods apart from the reading exercise; use of script in print at the first, transition from script to print; use of blackboard; the picture and its uses; seat exercises. The second stage deals with reading for thought and pleasure with some freedom; use of primers, blackboards, and supplementary readers; increased attention to expression; value of imitative reading at this stage; training the ear to the beauty of language through the rhythm and music of poetry; word-drill continued. The objects of the advanced stage are to give the pupil the power to communicate in an effective and pleasing manner the thoughts which he has been trained to extract for himself from the printed page; to create and foster a taste for good literature.

The necessity for attention to the principles of vocal expression; time, inflection, pitch, force, quality, pause, phrasing, emphasis, stress; and to exercises for rendering the organs of speech subservient to the will—vocalization, articulation, breathing, development of chest and lungs, vocal training for pure tone; the connection between the reading lesson and the singing lesson.

III. *Spelling.*

The special object of the course of spelling is to prepare the teacher to secure accuracy in the mechanism of written word-expression. The course includes the following topics:

The relation of spelling to other subjects; special relation to writing and to reading; teaching spelling, not merely testing; incidental teaching; selection of material; right grouping of words; causes of bad spelling; the age and mental status of pupils as conditions of good spelling.

Appeals to the eye, to the ear, by training the muscular sense—separately or in combination; oral spelling, transcription, sight spelling, memory spelling, and word building—advantages and disadvantages of each; spelling rules; value, how taught; relation of the reading lesson to spelling words therein; use of the board, of the dictionary, of the spelling book; requirements on the part of the teacher; detection and correction of errors, re-writing; value of spelling drills and reviews, and how to conduct them; need of varying method.

IV. *Literature.*

The special object of the course in Literature is to prepare the teacher to create in his pupils a taste for good literature while broadening their knowledge, moulding their characters, and aiding them to appreciate the beauty and power of artistic expression of thought and feeling. The course includes the following topics:

The nature and elements of literature; restricted meaning for elementary classes; importance of the study in the development of character; its value in the cultivation of the imagination and taste; main object the comprehension of the meaning; futility of attempts to develop formally the critical sense; correlation with the other subjects of the course.

Qualities of literature that appeal to children at different stages; paramount importance of selecting material suitable for the different stages of child life; the relative values of prose and poetry; complete wholes *versus* extracts; teacher's work with pupils to be oral at first; comparison of the values of reading and telling; pupils to read for themselves as soon as practicable; seat work and home work in literature; the study to be pleasurable, a fundamental condition; special importance of the teacher's own qualifications; intensive and extensive study; importance and method of memorizing selections; importance of the school library; how to secure the co-operation of the home.

Preparation by pupils and teacher; from whole to part, then back to whole; purpose and suitability of the introduction; place of the author's biography; meaning of words, phrases and sentences, important only as parts of the whole; treatment of figures of speech, etc.; value of oral and written reproduction; importance of oral reading of selection after study thereof; difficulty of examining in literature; specimen examination questions.

Suggestions as to suitable fairy-tales, fables, nature-stories, poems, etc.; value of stories containing some dramatic action, some pleasing personality or incident; the basis of selection, the ends of the child's emotional nature.

V. *Grammar.*

The special object of the course in Grammar is to prepare the teacher to give the pupils a basis for self-criticism in language by developing the principles of language structure, to secure precision of expression, and to train in habits of logical analysis. The course includes the following topics:

Meaning of English grammar; its relation to speech, composition, reading, and literature; the use and value of our remaining inflections; English grammar, the logic of English speech; reasons for and against retaining it in elementary schools; difficulties inherent in the subject; how to begin it; no systematic grammar lessons before Form IV.; the parts important for elementary classes; outline in order of the indispensable portions of the subject; the danger of over-emphasizing its value as a means of logical training.

Principles to be observed in its teaching; basing it on the concrete; the sentence, the starting point; basal value of function; order and method of early lessons; value of correct definitions—how to be obtained, how to be applied; analysis and parsing, aim and value of each; value of diagrams; importance of classification; oral and written exercises; value of false syntax; common mistakes in teaching.

VI. *History.*

The special object of a course in History is to prepare the teacher to train pupils to adapt human experiences to present situations. In the elementary stages the chief objects are to arouse an interest in historical studies, to enable the pupils to appreciate the logical sequence of events, and to give them a knowledge of their civil rights and duties; also to create a love for country. The course includes the following topics:

Topical and chronological methods compared; three stages of historical teaching: picture and story stage, the information stage, the intellectual stage; importance of developing interest; the place and value of local history; value of Canadian history, and of British history since the Elizabethan period; aids and illustrations; value of civics in the different grades; how to use text-books; the character of supplementary books suited to pupils of different grades.

Importance of preparation by the teacher; preparation by pupils; oral and written recitations; the lecture method in combination with work by pupils; use of maps, blackboards, etc.

Suggestions as to the selection and arrangement of suitable material for the different grades, such as biographies, customs and habits of people, history of aborigines and pioneers, historical epochs, characteristics of nations, beginnings of governments, histories of industries, etc.; the correlation of history with geography, reading, and literature; ballads, orations, epics, legends and tales of chivalry, narrative poems, historical novels; the history and significance of the flag.

Errors to be avoided in teaching History. Trivial events that have no general significance, full chronologies, generalogies of kings, enlarged descriptions of military campaigns, etc.; dangerous discussion of religious movements and of recent contemporary history; the giving of condensed notes or epitomized statements, etc.; the use of cram books.

VII. *Geography.*

The special object of a course in Geography is to prepare the teacher to show man's place in the world and to extend man's control over the forces of nature. This subject and Nature Study and Elementary Science occupy a fundamental position in the course of studies; a knowledge of them enables man to interpret new experiences, to understand the experiences of others, and to adapt himself to new conditions. The course includes a definition of the scope of the subject; also the following topics:

Fundamental principles; causes and effects; the analytic, synthetic; inductive, deductive, topical and other methods, advantages and disadvantages of each; common mistakes and how to avoid them; study begins with home locality and extends therefrom; proper use of maps and globes; scales of maps and projections; order of topics in teaching a country or continent; danger of too great detail; relation to history; special importance of preparation by the teacher.

Aids to Teaching: Maps, globes, pictures, blackboard drawing, natural objects, specimens of products, lantern slides, stereopticon views; representations through modelling and through map-drawing; weather observations and records; simple geographical experiments; geographical excursions, value and management; inter-school correspondence; value of reference library, books of travel, etc.

VIII. *Arithmetic.*

The special object of the course in Arithmetic is to prepare the teacher to familiarize his pupils with the processes of arithmetic, so that they may apply them readily and accurately in making such calculations as their future life may render necessary; also to employ it effectively as a means of logical training. The course includes the following topics:

The nature of number; the origin of number as a result of the necessity for the valuation or limitation of quantity by measurement; the unit: its nature and use.

Inductive and deductive methods of treatment, their relation; the use of text-books and of the prescribed apparatus; the importance of training in accuracy and speed in computation; danger of over-emphasizing the value of arithmetic as a means of logical training.

Applied Arithmetic: Oral arithmetic, its importance, place, and use; problems, their value, essentials of proper solutions; the "unitary method" discussed.

Methods of dealing with the most important arithmetical operations in accordance with the requirements of the class.

IX. *Algebra.*

The special object of the course in Algebra is the same as that in arithmetic, having regard to the fact that algebra is arithmetic generalized. The course includes the following topics:

When and how to introduce it; its nature and scope; its relation to arithmetic; a comparison of the nature and application of its symbols and operations with those of arithmetic; the equation as a means of connecting the subject with arithmetic and of introducing its symbols; the origin and explanation of algebraical symbols.

The use of induction, deduction, and mathematical induction in algebra.

Testing algebraic operations by "checking;" application of algebra to geometry; simple graphs.

Methods of dealing with the most important algebraic operations in accordance with the requirements of the class.

X. *Geometry.*

The special object of the course in Geometry is to enable the teacher to train the reasoning powers of his pupils by inductive and deductive processes. The course includes the following topics:

The nature and scope of the subject; an outline of the development of geometry; when geometry should be begun; methods of treatment—inductive and deductive; the relation of inductive geometry to deductive geometry; the inductive course for beginners.

Method of introducing the definitions.

The use of simple instruments, compasses, protractor, divider and set square, in the measurement of lines and angles; the construction of lines and angles of given magnitude and the construction of geometrical figures.

The inductive method of proving a few of the leading propositions of Euclid, through the accurate construction of figures; the deductive application of principles as they are reached through induction; accuracy in construction coordinate with exactness of thought.

History of Education. (Fifteen lessons.)

The study of the History of Education widens the professional outlook and rationalizes school practice through the discussion of the development of educational theories. It interprets such theories and practices in their relation to the social ideals and processes of their day and the continuity of their development, and in the light of the Science of Education. As a phase of the history of civilization, it requires an historical background; as a treatment of varying national ideals, it discusses movements rather than individuals. The course includes the following topics:

(1) *Greek Education*: The Greeks, their social organization, the city state; old Greek education, with Spartan education as its type; new Greek education, with Athenian education as its type; the great educational theorists, Socrates, Plato, and Aristotle; the idea of a liberal education.

(2) *Roman Education*: National ideals of Rome and Greece contrasted; social organization of the Romans; educational ideas; Roman schools; the idea of a practical education.

(3) *Education in the Middle Ages*: Contrast between the Classic and the Mediæval world; life in the Middle Ages; influence of Christianity on education; early Christian schools; the education of the cloister and the castle.

(4) *The Renaissance and the Rise of Humanism*: The relation of the Renaissance to modern civilization; the Renaissance as represented by Erasmus, Ascham, and Sturm; humanistic conception of education; humanism and realism.

(5) *The Reformation and the Counter-Reformation*: The Reformation and the Renaissance; Luther and elementary education in Germany; schools of the Jesuits and other religious orders.

(6) *Realism and Science in Education*: Humanism and culture *versus* realism and utilitarianism; verbal realism as represented by Rabelais; social realism as represented by Montaigne; sense realism as represented by Comenius.

(7) *Education according to Nature*: Development of the new conception of education; Locke and Rousseau; nature *versus* culture.

(8) *Modern Educational Theories*: The Psychological ideal as represented by Pestalozzi, Herbart, and Froebel; the Sociological ideal, education as social adjustment.

(9) *Contemporary Tendencies in Education*: As illustrated in the development of public education in Great Britain, the United States, and Ontario.

Book of Reference.

Monroe's *Brief Course in the History of Education.*

School Organization and Management. (Twelve lessons.)

The object of the course is to give the teacher, in the light of the Science of education, a knowledge of the technique of school management and organization, which will enable him to secure the smooth and efficient working of his school. The course includes the following topics:

(1) *The Teacher*: Natural qualifications of a good teacher; importance of scholarship, of training, of experience, of professional studies, of wide culture, of Teachers' Associations, etc.; the teacher's relations with the principal, the inspector, trustees, parents; his civic and social duties; his personal power and influence in the school, in the community; his daily preparation for teaching; correcting written exercises; care of health.

(2) *Teaching*: What is meant by teaching; the teacher to know the subject, the child, and the method; characteristics of good teaching; common defects.

(3) *Classification*: The meaning and the problems of school organization; promotions, when and how made; in graded schools, the division of subjects and pupils among the several teachers.

(4) *The Daily Programme*: Its purpose and value; principles involved in the construction of a time-table; seat work; individual blackboard work; the question of fatigue; typical time-tables for graded and for ungraded schools; school records.

(5) *Technique of Class Instruction*: Characteristics of a good lesson; common defects; effects of over-teaching; means of securing the interest and sympathy of the pupils; advantages of class instruction; defects of a rigid class instruction; value of the individual system.

(6) *Examinations*: Good effects; bad effects; school results that cannot be tested by examinations: how to set examination papers; reading and valuing the answers; examinations as related to promotions.

(7) *School-room Routine*: Chief varieties of mechanizing routine, their advantages and disadvantages; appointment of monitors.

(8) *Desirable School Habits*: Punctuality, neatness in person and in work; accuracy, quietness, industry, obedience; their relation to moral training.

(9) *School Incentives*: Kinds and office; effects on character, on school work, on health.

(10) *Order and Discipline*: What is meant by good order; authority essential for effective discipline; the chief elements of governing power; faults and how to avoid them; co-operation of school and home; punishment; ends and necessity; right conditions; characteristics of judicious punishment; injudicious punishment; the discipline of consequences.

(11) *Morals and Manners*: Importance in a scheme of education; character-building, the chief object of education; the teacher's personal influence; the child's susceptibility and initiativeness; temperaments and dispositions; how to give right notions of conduct.

(12) *Physical Education*: Relations of physical and intellectual development; importance of change of work; value of plays and games organized or unorganized play; the teacher on the play-ground; physical exercise within the school.

(13) *The Kindergarten*: Its essential principles; relation to the school system as a whole.

(14) *School Accommodation and Premises*: For information in addition to that given at last year's Summer School, the teacher-in-training is referred to the Departmental Circular, No. 33, of 1907.

Book of Reference.

Landon's *Principles and Practice of Teaching and School Management.*

Examinations.

In addition to the daily oral and written exercises there will be a final written examination covering all the courses, in accordance with the following time-table:

Tuesday, August 4th.

The Science of Education ..... 9.00 till 11.45 A.M.
Special Methodology—First Paper ..... 2.00 till 4.00 P.M.

Wednesday, August 5th.

The History of Education ..... 8.45 till 10.15 A.M.
School Organization and Management .....10.30 till 12.00 M.
Special Methodology—Second Paper ..... 2.00 till 4.00 P.M.

The maximum values for the subjects shall be as follows:

The Science of Education, 300; School Management and Organization, and the History of Education, 100 each; Special Methodology, each paper, 150.

Of the marks for each subject, one-third shall be allowed for the class exercises and the rest for the final examination.

December, 1907.

Syllabus of the Professional Summer School, 1908, Model School Standard, Last Session. In Accordance with "An Act Respecting the Qualifications of certain Teachers," of 1907.

[Circular No. 61 (3)].

Prefatory Memorandum.

I. Application for admission to this Summer School must be made on or before March 1st, 1908. As soon as possible thereafter, the locality of the School will be announced. The session will begin on Monday, July 6th, at 2 p.m., and end on Wednesday, August 5th. As this will be the last Summer School of Model School standard, those teachers who intend to qualify under "An Act respecting the Qualification of Certain Teachers," of 1907, should govern themselves accordingly. Next summer, if the conditions render it necessary, more than one School will be provided.

II. The staff of the School will assume as follows:

(1) That each teacher-in-training has studied carefully McMurry's *The Method of the Recitation* and Landon's *Principles and Practice of Teaching and School Management.*

(2) That each teacher-in-training has carefully reviewed the academic work in each subject taken up under Special Methodology.

III. Summer Schools, open to all, are held each year, in Art, Nature Study, Science, and Manual Training, at the Ontario Agricultural College, Guelph, and at the University of Toronto. If a sufficient number apply, a Special Summer School will be held in these subjects in 1909 for teachers belonging to the Roman Catholic Religious Communities who are engaged in teaching in the Separate Schools.

SYLLABUS OF COURSES. EDUCATIONAL PRINCIPLES AND GENERAL METHODOLOGY. (THIRTY LESSONS.)

The object of the course is to provide the teachers with such a working conception of the nature of Education and of Methodology as will improve natural tact and skill by determining procedure and forming ideals. The course includes the following topics:

(1) *Aim of Education*: Definitions of education; individual and social phases of education; their relation.

(2) *The Educational Process*: Its nature and relation to the end and means of education.

(3) *Subject Matter of Instruction*: The principle of correlation and concentration of studies.

(4) *Method of Instruction*: The relation of method to subject matter; the problem of method as a psychological problem.

(5) *Habit and Association*: Primary instincts or inherited co-ordination; relation of habit to primary instincts; bodly conditions of the formation of habits; functions and limitations of habit; nature of association; conditions of association; varieties of association; relation of association to habit; how to form permanent associations.

(6) *Attention*: Nature of attention as a process; conditions of attention; relations of attention to habit and association: interest, its nature and relation to attention; voluntary and non-voluntary attention distinguished; attention in young children and in adults compared; divided attention and concentration of attention; securing and retaining attention; obstacles to attention.

(7) *Apperception and Retention*: Meaning of the terms; their relation; mental assimilation, growth, and development.

(8) *Laws of Mental Development*: General principles of development; the transition from the practical to the intellectual attitude in learning: stages of intellectual development.

(9) *Individual and General Notions*: How they are distinguished from each other; how individual notions should be approached and presented; how to proceed from individual to general notions; the value of types in the development of general notions; how general notions should be applied.

(10) *Laws underlying the Process of Teaching*: The relation of analysis to synthesis, of induction to deduction.

(11) *Recitations*: Their importance; preparation by teacher and pupils; manner of the teacher before the class; value of method; oral and written work; empirical, developing, lecture, conversational and other methods; illustrative teaching; analytic and synthetic methods; inductive and deductive methods: auxiliary methods; faulty teaching.

(12) *The Art of Questioning*: Its aims; its abuse:; the teacher's prerequisites; matter, form, kind, and order of questions; faulty questions; testing and training questions; class questioning—simultaneous, consecutive, promiscuous, and combined methods; forms of answers; criticism of answers.

(13) *Moral Training*: Basis of; need of moral training; intellectual growth related to moral growth; the personality of the teacher; moral value of discipline and good teaching; incidental moral instruction; moral value of school studies; character building the true end of education; training of the will; formation of tastes and habits; relation of morals to manners.

Special Methodology. (Ninety lessons.)

The books to be studied as a preparation for the following courses are those used in each subject in the Public and the High Schools.

The courses as defined below contain both information and topics for discussion. To the latter the Master will devote most of his attention; and, owing to the short time at his disposal, he will give directions and suggestions as to future work after he has dealt with general and essential principles. Occasionally, also, when he considers it judicious, he will use the teachers-in-training as a class for illustrative purposes.

The object of the courses is to enable the teacher-in-training to adapt to the work in each subject the principles of General Method. All the work is done in terms of the Public School Programme of Studies. In connection with each course the rationale and the sequence of the details of each of the prescribed subjects will be systematically developed; also the proper use of the equipment prescribed by the Regulations.

Provision is made in the Introduction on p. 3 for a discussion of the general aim of education. The special aim of each subject in the programme dealt with below is also stated in general terms. Such statements are important, as they enable the teacher to evaluate and select details.

I. *Language and Composition.*

The special aim of the course in Language and Composition is to prepare the teacher to train his pupils to speak and write good English as a fixed, unconscious habit. The course includes the following topics:

The paramount importance of language training.

The nature of language and the connection between language and thought; every lesson a means of training in language; much of the best language training incidental; the habit of speaking and writing good English to be formed unconsciously by reading good literature and associating with those who speak good English, also by the teacher's critical oversight; the influence of the teacher's own language and the importance of libraries for supplementary reading; the influences opposed to good usage; common faults and how to deal with them; steady, unremitting attention by the teacher in the school and in the play-ground essential; criticism by pupils and teachers, its value and dangers; how to make pupils self-critical.

Composition of two kinds: oral and written; both to be taught in class answers, and in a systematic series of special exercises; oral composition throughout; special utilization of oral work in the early stages, written as soon as pupil has attained proficiency in the mechanics of writing; material for both kinds; the content of lessons to be of worth and of interest to the pupils; familiar talks to encourage freedom and fluency in speech; the reproduction of fairy and folk stories, fables, poems, biographies, etc., which have a vocabulary and idiom similar to those of ordinary speech; relative value of reading and telling stories, etc., for reproduction; use of imagination; transition from reproduction to originality; personal experiences, real and imaginary; stories from pictures; developing themes from minor incidents; extending the pupils' vocabulary; value of memorizing poetry and prose; comparative value of verse and prose; how to memorize.

Connection between oral and written composition; value of their combination in the same lesson; written sentence work; when to introduce it;

aims to be kept in view; the value of transcription, paraphrasing, transposition, change of construction, interchange of direct and indirect narration, grammatical equivalents; paragraph compositions; the whole composition; the choice of topics; gathering, selecting, and arranging material; the value of topical outlines; the arrangement of paragraphs in a composition; letter-writing with special attention to form and style.

How to teach the mechanics of written composition; capitals, punctuation, and quotation marks, abbreviations, etc.

Lesson Procedure: Planning the composition; use of the blackboard; compositions written in school, supervision and aid during writing; homework, how to provide therefor; how to correct school and home compositions; the value of re-writing.

11. *Reading.*

The special object of the course in Reading is to prepare the teacher to train his pupils to get the writer's thoughts and feelings (*intelligent* reading) and to communicate them to the listener so that he may appreciate them (*intelligible* reading). The course includes the following topics:

The pupil's ability to interpret words limited by his experience; his previous preparation; relation of idea, sound, and printed symbols; the formation of accurate visual and auditory impressions; constant necessity for connecting the printed symbol directly with the idea; interpretative reading; expression as conditioned by the thought and the presence of the person to whom it is addressed; criticism by teachers and by pupils; function and value of model reading, silent reading, sight reading; dramatic reading, elocution, declamation; devices for securing rapid word recognition; devices for securing natural expression; the pupil's use of the dictionary; common faults on the part of both pupil and teacher and how to correct them, importance of training in reading and the principles of vocal expression to pupil's ordinary speech and general culture.

The first stage in teaching Reading deals with the sentence, word, phonic, alphabetical methods; their advantages and disadvantages; advantages of a combination of methods; criticism of devices that fix attention upon word forms rather than thought; drill on troublesome words at periods apart from the reading exercise; use of script or print at the first, transition from script to print; use of blackboard; the picture and its uses; seat exercises. The second stage deals with reading for thought and pleasure with some freedom; use of primers, blackboards, and supplementary readers; increased attention to expression; value of imitative reading at this stage; training the ear to the beauty of language through the rhythm and music of poetry; drill in troublesome words and rapid word recognition. The objects of the advanced stage are to give the pupil the power to communicate in an effective and pleasing manner the thoughts which he has been trained to extract for himself from the printed page; to create and foster a taste for good literature.

The necessity for attention to the principles of vocal expression; time, inflection, pitch, force, quality, pause, phrasing, emphasis, stress; and to exercises for rendering the organs of speech subservient to the will—vocalization, articulation, breathing, development of chest and lungs, mouth training for pure tone; the connection between the Reading lesson and the Singing lesson.

III. *Spelling.*

The special object of the course in Spelling is to prepare the teacher to secure accuracy in the mechanism of written word-expression. The course includes the following topics.

The relation of spelling to other subjects; special relation to writing and reading; teaching spelling, not merely testing; incidental teaching; selection of material; right grouping of words; causes of bad spelling; relation of the age and mental status of pupils.
rately or in combination; oral spelling, transcription, sight spelling, memrately or in combination; oral spelling, transcription, sight spelling, memory spelling, and word building, advantages and disadvantages of each; spelling rules, value, how taught; relation of the reading lesson to spelling words therein; use of the board, of the dictionary, of the spelling book; requirements on the part of the teacher; detection and correction of errors, re-writing; need of varying method.

IV. *Literature.*

The special object of the course in Literature is to prepare the teacher to create in his pupils a taste for good literature while broadening their knowledge, moulding their characters, and aiding them to appreciate the beauty and power of artistic expression of thought and feeling. The course includes the following topics:

The nature and elements of literature; restricted meaning for elementary classes; importance of the study in the development of character; its value in the cultivation of the imagination and taste; main object the comprehension of the meaning; futility of attempts to develop formally the critical sense; correlation with the other subjects of the course.

Qualities of literature that appeal to children at different stages; paramount importance of selecting material suitable for the different stages of child life; the relative values of prose and poetry; teacher's work with pupils to be oral at first; comparison of the values of reading and telling; pupils to read for themselves as soon as practicable: seat work and home work in literature; the study to be pleasurable, a fundamental condition; special importance of the teacher's own qualifications; intensive and extensive study; importance and method of memorizing selections; importance of the schol library; how to secure the co-operation of the home.

Preparation by pupils and teacher; from whole to part, then back to whole; purpose and suitability of the introduction; place of the author's biography; meaning of words, phrases and sentences, important only as parts of the whole; treatment of figures of speech, etc.; value of oral and written reproduction; importance of oral-reading of selection after study thereof; difficulty of examining in literature; specimen examination questions.

Suggestions as to suitable fairy-tales, fables, nature-stories, poems, etc.; value of stories containing some dramatic action, some pleasing personality or incident; the basis of selection, the ends of the child's emotional nature.

V. *Grammar.*

The special object of the course in Grammar is to prepare the teacher to give the pupils a basis for self-criticism in language by developing the principles of language structure, to secure precision of expression, and to train in habits of logical analysis. The course includes the following topics:

Meaning of English grammar; its relation to speech; composition; reading, and literature; the use and value of our remaining inflections; English grammar, the logic of English speech; reasons for and against retaining it in elementary schools; difficulties inherent in the subject; how to begin it; no systematic grammar lessons before Form IV.; the important parts for elementary classes; outline in order of the indispensable portions of the subject; the danger of over-emphasizing its value as a means of logical training.

Principles to be observed in its teaching; basing it on the concrete; the sentence, the starting point; basal value of function; order and method of early lesssons; value of correct definitions—how to be obtained, how to be applied; analysis and parsing, aim and value of each; diagrams; importance of classification; oral and written exercises; value of false syntax; common mistakes in teaching.

VI. *History.*

The special object of a course in History is to prepare the teacher to train pupils to adapt human experiences to present situations. In the elementary stages the chief objects are to arouse an interest in historical studies, to enable the pupils to appreciate the logical sequence of events and to give them a knowledge of their civil rights and duties; also to create a love for country. The course includes the following topics:

Topical and chronological methods compared; three stages of historical teaching: picture and story stage, the information stage, the intellectual stage; importance of developing interest; the place and value of local history; value of Canadian history, and of British history since the Elizabethan period; aids and illustrations; value of civics in the different grades; how to use text-books; the character of supplementary books suited to pupils of different grades.

Importance of preparation by the teacher; preparation by pupils; oral and written recitations; the lecture method in combination with work by pupils; use of maps, blackboards, etc.

Suggestions as to the selection and arrangement of suitable material for the different grades, such as biographies, customs and habits of people, history of aborigines and pioneers, historical epochs, characteristics of nations, beginnings of governments, histories of industries, etc.; the correlation of history with geography, reading, and literature; ballads, orations, epics, legends and tales of chivalry, narrative poems, historical novels; the history and significance of the flag.

Errors to be avoided in teaching History: Trivial events that have no general significance, full chronologies, genealogies of kings, enlarged descriptions of military campaigns, etc.; dangerous discussion of religious movements and of recent contemporary history; the giving of condensed notes or epitomized statements, etc.; the use of cram books.

VII. *Geography.*

The special object of the course in Geography is to prepare the teacher to show man's place in the world and to extend man's control over the forces of nature. This subject and Nature Study and Elementary Science occupy a fundamental position in the course of studies; a knowledge of them enables man to interpret new experiences, to understand the experiences of others, and to adapt himself to new conditions. After defining the scope of the subject, the Master should take up the following topics:

Fundamental principles; causes and effects; the analytic, synthetic, inductive, deductive, topical and other methods, advantages and disadvantages of each; common mistakes and how to avoid them; study begins with home locality and extends therefrom; proper use of maps and globes; scales of maps and projections; order of topics in teaching a country or continent; danger of too great detail; relation to history; special importance of preparation by the teacher.

Aids to Teaching: Maps, globes, pictures, blackboard drawing, natural objects, specimens of products, lantern slides, stereopticon views; representation through modelling and through map-drawing: weather observations and records; simple geographical experiments; geographical excursions, value and management; inter-school correspondence; value of reference library, books of travel, etc.

VIII. *Arithmetic.*

The special object of the course in Arithmetic is to prepare the teacher to familiarize his pupils with the processes of arithmetic, so that they may apply them readily and accurately in making such calculations as their future life may render necessary; also to employ it effectively as a means of logical training. The course includes the following topics:

The nature of number; the origin of number as a result of the necessity for the valuation or limitation of quantity by measurement; the unit —its nature and use.

Inductive and deductive methods of treatment, their relation; the use of text-books and of the prescribed apparatus; the importance of training in accuracy and speed in computation; danger of over-emphasizing the value of arithmetic as a means of logical training.

Applied Arithmetic: Oral arithmetic, its importance, place and use; problems, their value, essentials of proper solutions; the "unitary method" discussed.

Methods of dealing with the most important arithmetical operations in accordance with the requirements of the class.

Other Subjects.

Owing to the shortness of the session no academic work can be taken up in the following subjects. The Master will, however, deal briefly with each topic from the pedagogical point of view, so that the educational value and relation of each subject may be appreciated:

Nature Study: Aims in conducting Nature Study; methods of Nature Study; correlation with other subjects; distinction between Nature Study and Science in aim and spirit; nature collections, their use and abuse; field excursions, their purpose and the manner of conducting them; uses of school gardens; illustrations of the work in the different school forms.

Art: Aims in teaching Art; its value in motor-training; form study, drawing, and colour-work; relation to other school subjects; illustrations of the work in the different school forms.

Manual Training: Aims in teaching Manual Training; its value in motor-training; discussion of the kinds suitable for the different forms, with the particular purposes of each; relation to other school subjects and to the work of practical life; illustrations of the work in the different school forms.

School Organization and Management. (Twenty lessons.)

The object of the course is to give the teacher, in the light of the principles of education, a knowledge of the technique of school management and organization, which shall enable him to secure the smooth and efficient working of his school. The course includes the following topics:

1. *The Teacher*: Natural qualifications of a good teacher; importance of scholarship, of training, of experience, of professional studies, of wide culture, of Teachers' Associations, etc.; the teacher's relations with the principal, the inspector, trustees, parents; civic and social duties; personal power and influence in the school, in the community; daily preparation for teaching; correcting written exercises; care of health.

2. *Classification*: The meaning and the problems of school organization; promotions, when and how made; in graded schools the division of subjects and pupils among the several teachers.

3. *The Daily Programme*: Its purpose and value: Principles involved in the construction of a time-table; seat work; individual blackboard work; the question of fatigue; typical time-tables for graded and for ungraded schools; school records.

4. *Written Examinations*: Good effects; bad effects; school results that cannot be tested by examinations; how to set examination papers; reading and valuing the answers; examinations as related to promotions.

5. *School-room Routine*: Chief varieties of mechanizing routine, their advantages and disadvantages; appointment of monitors.

6. *Desirable School Habits*: Punctuality; neatness in person and in work; accuracy; quietness; industry; obedience; the relation of the preceding to moral training.

7. *School Incentives*: Kinds and office; effects on character, on school work, on health.

8. *Order and Discipline*: What is meant by good order; the chief elements of governing power; faults and how to avoid them; co-operation of school and home; punishment; ends and necessity; right conditions; characteristics of judicious punishment; injudicious punishment; the discipline of consequences.

9. *Physical Education*: Relations of physical and intellectual development; importance of change of work; value of plays and games; organized or unorganized play; dangers of fatigue; the teacher on the playground; physical exercise within the school.

10. *The Kindergarten*: Its essential principles; relation to the school system as a whole.

NOTE.—For information as to the necessary details of School Accommodations and Equipment, the teacher-in-training is referred to Circular 33 of 1907.

Examinations.

In addition to the daily oral and written exercises, there will be a final written examination covering all the courses, in accordance with the following time-table:

Tuesday, August 4th.

Special Methodology—First Paper	9.00 till 11.45 A.M.
The Principles of Education and General Methodology	2.00 till 4.00 P.M.

Wednesday, August 5th.

Special Methodology—Second Paper ..... 9.00 till 11.45 A.M.
School Organization and Management ..... 2.00 till 4.00 P.M.

The maximum values for the subjects shall be as follows.

Educational Principles and General Methodology, 150; School Organization and Management, 150; Special Methodology, each paper, 250.

Of the marks for each subject, one-third shall be allowed for the class exercises and the rest for the final examination.

December, 1907.

II. ORDERS IN COUNCIL.

Mr. John Arthur Houston, M.A., appointed Registrar of the Department of Education. Approved 4th January, 1907.

Twenty-one graduates in Household Science of the Macdonald Institute granted certificates of qualification as Teachers of Household Science in the Public and High Schools. Approved 18th February, 1907.

Miss Gertrude Strugnell appointed stenographer for the Education Department. Approved 3rd May, 1907.

Regulations regarding the distribution of the Legislative grant to Rural, Public and Separate schools in the organized counties, and also in the districts. Approved 22nd May, 1907.

Thirteen graduates of the Lillian Massey School of Household Science and Art granted certificates of qualification as Teachers of Household Science in the Public and High Schools. Approved 6th June, 1907.

Mr. Holland Rockwell Scovell, B.A., appointed Inspector of part of the District of Muskoka, such appointment to take effect on and from the 1st September, 1907. Approved 24th June, 1907.

Mr. John F. Sullivan appointed Inspector of Roman Catholic Separate Schools, such appointment being for one year and to take effect from 1st day of September 1907. Approved 24th June, 1907.

High School established, subject to the requirements of the law and regulations being met, in the town of New Liskeard. Approved 12th July, 1907.

Mr. J. P. Finn, B.A., appointed Principal of the English-French Training School for Teachers at Ottawa, and Mr. J. M. Fleury appointed Assistant Teacher, and also teacher in the Model School, said appointments to be for one year, dating from the 1st day of September, 1907. Approved 12th July, 1907.

Acceptance of the courses of study and examinations of the Faculty of Education of the University of Toronto in connection with the professional training of first class teachers and High School assistant teachers. Approved 23rd July, 1907.

Reorganization of Normal School Staffs and appointment of the following additional teachers, the appointments to date from 1st September, 1907, to be for one year, and to become permanent after such year's service, on the Minister's approval:

S. J. Radcliffe, B.A., S. A. Morgan, B.A., P. Pæd., D. D. Moshier, B.A., B. Pæd., D. Walker, B.A., S. Silcox, B.A., D. Pæd., J. F. Power, M.A.; also Mr. J.W. Westervelt appointed Writing Master. Approved 23rd July, 1907.

Agricultural Training established in the High School at Essex, and in the Collegiate Institutes at Collingwood, Galt, Lindsay, Morrisburg, and Perth. Approved 23rd July, 1907.

Mr. John Russell Humphreys appointed Accountant of Education Department. Approved 23rd July, 1907.

Regulations for the reorganization of Continuation Classes approved 24th July, 1907.

Regulations for Agricultural Departments in High Schools approved 9th August, 1907.

Acceptance of the courses of study and examinations of the Faculty of Education of Queen's University, Kingston, in connection with the professional training of first class teachers and High School assistant teachers. Approved 14th August, 1907.

Mr. Edward Jones appointed Inspector of Separate Schools, said appointment to take effect from 1st day of September, 1907. Approved 30th August, 1907.

Following appointments made to the teaching staff of the Ottawa Model School:

Mr. John A. Dobbie, Miss Annie M. Delaney, Miss Bertha M. Hall, Mr. Roy F. Fleming, as Teacher of Art; and Miss Edith E. Marshall as Secretary and Librarian. Approved 9th September, 1907.

High School established, subject to the law and regulations being met, in the town of Sudbury. Approved 9th September, 1907.

Regulation regarding the grants payable to Continuation Classes in 1907 approved 9th September, 1907.

Mr. W. B. Donkin appointed Trades Instructor in the Institution for the Blind at Brantford, said appointment to date from 25th September, on the usual probationary service of one year. Approved 13th September, 1907.

Regulation concerning the admittance of students not 18 years of age to County Model Schools. Approved 13th September, 1907.

Mr. Daniel Green appointed Supervisor of Boys in the Institution for the Blind at Brantford. Approved 25th October, 1907.

Mr. Harry Nugent appointed Farmer and Farm Instructor at the Institution for the Deaf and Dumb, Belleville. Approved 25th October, 1907.

Regulations regarding Graduation Diplomas, Entrance Examinations into the Faculties of Education and the Normal and Model Schools, Examining Boards, approved 25th October, 1907.

Mr. V. Hector Gaboury appointed Inspector of Bi-ligual Schools for one year beginning 1st January, 1908, his continuance in this office being conditional upon his passing within a reasonable period the professional examination for Public School Inspectors to be prescribed after July, 1908. Approved 7th November, 1907.

Amendments to the Regulations in reference to County Model School examinations, the granting of Second Class Interim Certificates to holders of Permanent Professional Third Class Certificates, and the renewal of Third Class Certificates. Approved November, 1907.

Regulations regarding Syllabus of Studies for the Normal Schools for the session 1907-8, approved 4th December, 1907.

Mr. Andrew McConnell appointed night watchman at the London Normal School. Approved 27th December, 1907.

APPENDIX H.—PUBLIC LIBRARIES, LITERARY AND SCIENTIFIC INSTITUTIONS, ETC.

REPORT OF T. W. H. LEAVITT, INSPECTOR OF PUBLIC LIBRARIES, SCIENTIFIC INSTITUTIONS AND LITERARY AND SCIENTIFIC SOCIETIES RECEIVING A SHARE OF THE LEGISLATIVE GRANT, IN THE PROVINCE OF ONTARIO, FOR THE YEAR ENDING 31ST DECEMBER, 1906.

To the Hon. R. A. Pyne, M.D., LL.D., Minister of Education for the Province of Ontario.

I have the honour to submit herewith the report on the Public Libraries Scientific Institutions and Literary and Scientific Societies receiving a share of the Legislative Grant for the year ending 31st December, 1906.

The following Libraries were incorporated during the year :—
Granton, Dunvegan.

The following Libraries were closed :—
Chepstow, Finch, Haileybury, Powassan, Severn Bridge.

The following Libraries did not report for the year 1906 :—

Addison, Algonquin, Alvinston, Arkona, Athens, Avonmore, Baden, Bajeros, Bancroft, Battersea, Bayham, Beeton, Belmont, Berwick, Binbrook, Bloomfield, Bognor, Brougham, Burnstown, Burritt's Rapids, Caistorville, Caledonia, Campbellford, Cannington, Cayuga, Cheltenham, Clarksburg, Coldsprings, Coldwater, Cookstown, Copleston, Copper Cliff, Crysler, Dawson, Depot Harbor, Dresden, Dromore, Dufferin, Dundalk, Dundella, Elgin, Emsdale, Enterprise, Fenella, Flesherton, Floradale, Fordwich, Forks of the Credit, Fort Frances, Freelton, Glencoe, Glen Cross, Gorrie, Goulais Bay, Harrowsmith, Hastings, Havelock, Hepworth, Highgate, Holland Centre, Holyrood, Inwood, Iroquois, Jasper, Kars, Kearns King, Kintore, Linwood, Lion's Head, Lorne Park, Lucan, Lyndon, Maberley, Maitland, Marksville, Maxville, Maxwell and Feversham, Melancthon, Melbourne, Mississippi, Molesworth, Mono Centre, Mono Mills, Moose Creek, Nairn Centre, Munster, North Augusta, Newbury, Newington, Ophir, Oil Springs, Pelee Island, Perth, Primrose, Rosemont, Schreiber, Shallow Lake, Spencerville, Sprucedale, Sunnidale, Sundridge, Tamworth, Thornton, Tiverton, Vandorf, Vars, Violet Hill, Wales, Watson's Corners, Webbwood, West Lorne, Wheatley, Wyoming, Yorker, Zepher.

The following table shows the locality of every Public and Free Library in the Province on the 1st December, 1907 :—

FREE AND PUBLIC LIBRARIES.

Counties and Districts.	Cities, Towns and Villages.
Addington	Camden, East.
"	Enterprise.
"	Napanee Mills, (Strathcona P.O.)
"	Newburgh.
"	Tamworth.
"	Yarker.
Algoma	Bruce Mines.
"	Chapleau.
"	Goulais Bay.
"	Marksville.
"	Nairn Centre.
"	Ophir.
"	Port Arthur.
"	Rat Portage (Kenora).
"	Sault Ste. Marie.
"	Schreiber.
"	Thessalon.
"	Victoria Mines.
"	Webbwood.
Brant	Brantford.
"	Burford.
"	Glenmorris.
"	New Durham.
"	Paris.
"	Scotland.
"	St. George.
Bruce	Bervie.
"	Cargill.
"	Chesley.
"	Elmwood.
"	Glamis.
"	Hepworth.
"	Holyrood.
"	Kincardine.
"	Lion's Head.
"	Lucknow.
"	Mildmay.
"	Paisley.
"	Pinkerton.
"	Port Elgin.
"	Ripley.
"	Riversdale.
"	Southampton.
"	Teeswater.
"	Tara.
"	Tiverton.
"	Underwood.
"	Walkerton.
"	Westwood.
"	Wiarton.
Carleton	Carp.
"	Corkery.
"	Dawson.
"	Kars.
"	Kinburn.
"	Manotick.
"	Metcalfe.
"	Munster.
"	North Gower.
"	Ottawa.
"	Richmond.
Dufferin	Glen Cross.
"	Grand Valley.
"	Honeywood.
"	Melancthon.
"	Mono Centre.
"	Orangeville.
"	Primrose.
"	Rosemont.
"	Shelburne.
"	Violet Hill.
Dundas	Chesterville.
"	Dundela.
"	Iroquois.
"	Matilda (Iroquois P.O.)
"	Morrisburg.
"	South Mountain.
"	Winchester.
Durham	Bowmanville.
"	Millbrook.
"	Orono.
"	Port Hope.
Elgin	Aylmer.
"	Bayham.
"	Dutton.
"	Port Stanley.
"	Rodney.
"	St. Thomas.
"	Shedden.
"	Sparta.
"	Springfield.
"	West Lorne.
Essex	Amherstburg.
"	Comber.
"	Essex.
"	Harrow.
"	Kingsville.
"	Leamington.
"	Pelee Island.
"	Walkerville.
"	Windsor.
Frontenac	Battersea.

FREE AND PUBLIC LIBRARIES—*Continued.*

Counties and Districts.	Cities, Towns and Villages.
Frontenac	Garden Island.
"	Harrowsmith.
"	Kingston.
"	Mississippi.
"	Sydenham.
Glengarry	Dunvegan.
"	Lancaster.
"	Maxville.
"	Williamstown.
Grenville	Burritt's Rapids.
"	Cardinal.
"	Easton's Corners.
"	Jasper.
"	Kemptville.
"	Maitland.
"	Merrickville.
"	North Augusta.
"	Oxford Mills.
"	Prescott.
"	Spencerville.
Grey	Ayton.
"	Badjeros.
"	Bognor.
"	Chatsworth.
"	Clarksburg.
"	Dromore.
"	Durham.
"	Dundalk.
"	Flesherton.
"	Holland Centre.
"	Holstein.
"	Kemble.
"	Hanover.
"	Lake Charles.
"	Markdale.
"	Meaford.
"	Maxwell and Feversham.
"	Owen Sound.
"	Priceville.
"	Shallow Lake.
"	Singhampton.
"	Thornbury.
Haliburton	Haliburton.
"	Minden.
Haldimand	Caledonia.
"	Canfield.
"	Cayuga.
"	Cheapside.
"	Dufferin (Clanbrassil
"	Dunnville. [P. O.)
"	Hagersville.
"	Jarvis.
"	Nanticoke.
"	Victoria (Caledonia P.O.)
"	York.
Halton	Acton.
"	Burlington.
"	Georgetown.
"	Milton.
Halton	Oakville.
Hastings	Bancroft.
"	Belleville.
"	Deseronto.
"	Frankford.
"	Madoc.
"	Marlbank.
"	Stirling.
"	Trenton.
"	Tweed.
Huron	Auburn.
"	Brucefield.
"	Blyth.
"	Brussels.
"	Clinton.
"	Dungannon.
"	Ethel.
"	Exeter.
"	Fordwich.
"	Goderich.
"	Gorrie.
"	Hensall.
"	Molesworth.
"	Seaforth.
"	St. Helen's.
"	Walton.
"	Wingham.
"	Wroxeter.
Kent	Blenheim.
"	Bothwell.
"	Chatham.
"	Dresden.
"	Duart.
"	Highgate.
"	Tilbury.
"	Ridgetown.
"	Romney.
"	Thamesville.
"	Wallaceburg.
"	Wheatley.
Lambton	Arkona.
"	Alvinston.
"	Brigden.
"	Bunyan.
"	Copleston.
"	Forest.
"	Inwood.
"	Oil Springs.
"	Petrolea.
"	Point Edward.
"	Sarnia.
"	Thedford.
"	Watford.
"	Wyoming.
Lanark	Allan's Mills.
"	Almonte.
"	Carleton Place.
"	Dalhousie.
"	Elphin.

FREE AND PUBLIC LIBRARIES.— *Continued.*

Counties and Districts.	Cities, Towns and Villages.
Lanark	Lanark.
"	Maberley.
"	Middleville.
"	Pakenham.
"	Perth.
"	Poland.
"	Smith's Falls.
"	Watson's Corners.
Leeds	Addison.
"	Athens.
"	Brockville.
"	Elgin.
"	Gananoque.
"	Mellorytown.
"	Newboro'.
"	Westport.
Lennox	Odessa.
"	Bath.
"	Napanee.
Lincoln	Abingdon.
"	Beamsville.
"	Caistorville.
"	Grantham (St. Catharines
"	Merritton [P. O.)
"	Grimsby.
"	Niagara.
"	Smithville.
"	St. Catharines.
Manitoulin	Cockburn Island.
"	Gore Bay.
"	Little Current.
"	Manitowaning.
Middlesex	Ailsa Craig.
"	Belmont.
"	Coldstream.
"	Dorchester.
"	Glencoe.
"	Granton.
"	Komoka.
"	London.
"	Lucan.
"	Melbourne.
"	Mt. Brydges.
"	Newbury.
"	Parkhill.
"	Strathroy.
"	Wardsville.
Muskoka	Bracebridge.
"	Baysville.
"	Gravenhurst.
"	Huntsville.
"	Port Carling.
Nipissing	Copper Cliff.
"	Kerns (Milberta P. O.)
"	North Bay.
"	Sturgeon Falls.
"	Thorndoe.
Norfolk	Bloomsburg.
"	Delhi.
Norfolk	Port Dover.
"	Port Rowan.
"	Simcoe.
"	Waterford.
Northumberland	Brighton.
"	Campbellford.
"	Cobourg.
"	Cold Springs.
"	Colborne.
"	Fenella.
"	Gore's Landing.
"	Grafton.
"	Warkworth.
Ontario	Beaverton.
"	Brooklin.
"	Brougham.
"	Cannington.
"	Claremont.
"	Oshawa.
"	Pickering.
"	Port Perry.
"	Sunderland.
"	Uxbridge.
"	Whitby.
"	Zephyr.
Oxford	Beachville.
"	Drumbo.
"	Embro.
"	Harrington.
"	Ingersoll.
"	Kintore.
"	Plattsville.
"	Norwich.
"	Otterville.
"	Princeton.
"	Tavistock.
"	Tillsonburg.
"	Thamesford.
"	Woodstock.
Parry Sound	Burk's Falls.
"	Callender.
"	Depot Harbor.
"	Emsdale.
"	Parry Sound.
"	Rosseau.
"	South River.
"	Sprucedale.
"	Sundridge.
"	Trout Creek.
Peel	Alton.
"	Belfountain.
"	Bolton.
"	Brampton.
"	Caledon.
"	Cheltenham.
"	Claude.
"	Forks of the Credit.
"	Inglewood.

FREE AND PUBLIC LIBRARIES.—*Continued.*

Counties and Disttrict.	Cities, Towns and Villages.
Peel	Lorne Park.
"	Mono Road.
"	Mono Mills.
"	Port Credit.
"	Streetsville.
Perth	Atwood.
"	Listowel.
"	Milverton.
"	Monkton.
"	Mitchell.
"	Shakespeare.
"	St. Mary's.
"	Stratford.
Peterborough	Hastings.
"	Havelock.
"	Lakefield.
"	Norwood.
"	Peterborough.
Prescott	Hawkesbury.
"	Vankleek Hill.
Prince Edward	Bloomfield.
"	Picton.
Rainy River	Dryden.
"	Fort Frances.
Renfrew	Admaston.
"	Arnprior.
"	Burnstown.
"	Cobden.
"	Douglas.
"	Forester's Falls.
"	Pembroke.
"	Renfrew.
"	White Lake.
Russell	Russell.
"	Vars.
Stormont	Avonmore.
"	Berwick.
"	Cornwall.
"	Crysler.
"	Moose Creek.
"	Newington.
"	Wales.
Simcoe	Alliston.
"	Angus.
"	Barrie.
"	Beeton.
"	Bradford.
"	Coldwater.
"	Collingwood.
"	Cookstown.
"	Creemore.
"	Elmvale.
"	Hillsdale.
"	Lefroy.
"	Midland.
"	Orillia.
"	Penetanguishene.
"	Stayner.

Counties and Districts.	Cities, Towns and Villages.
Simcoe	Sunnidale, (New Lowell [P.O.)
"	Thornton.
"	Tottenham.
Thunder Bay	Fort William.
Victoria	Bobcaygeon.
"	Cambray.
"	Fenelon Falls.
"	Kinmount.
"	Kirkfield.
"	Little Britain.
"	Lindsay.
"	Manilla.
"	Norland.
"	Oakwood.
"	Omemee.
"	Woodville.
Waterloo	Ayr.
"	Baden.
"	Berlin.
"	Elmira.
"	Floradale.
"	Galt
"	Hawkesville.
"	Hespeler.
"	Linwood.
"	New Dundee.
"	New Hamburg.
"	Preston.
"	Waterloo.
"	Wellesley.
Welland	Bridgeburg.
"	Fonthill.
"	Fort Erie.
"	Niagara Falls.
"	Niagara Falls South.
"	Port Colborne.
"	Ridgeway.
"	Thorold.
"	Welland.
Wellington	Alma.
"	Arthur.
"	Belwood.
"	Clifford.
"	Drayton.
"	Elora.
"	Erin.
"	Ennotville.
"	Fergus.
"	Glen Allan.
"	Guelph.
"	Harriston.
"	Morriston.
"	Mount Forest.
"	Palmerston.
"	Rockwood.
"	Speedside.
Wentworth	Ancaster.
"	Binbrook.
"	Dundas.

FREE AND PUBLIC LIBRARIES.—*Concluded.*

Counties and Districts.	Cities, Towns and Villages.
Wentworth	Freelton.
"	Hamilton.
"	Mill Grove.
"	Lynden.
"	Saltfleet, (Stony Creek
"	Waterdown. [P.O.)
York	Aurora.
"	Bracondale.
"	Deer Park.
"	Don.
"	East Toronto.
"	Highland Creek.
"	Islington.
"	King.
"	Maple.
"	Markham.
"	Mount Albert.
"	Newmarket.
"	Queensville.
"	Richmond Hill.
"	Scarboro'.
York	Schomberg.
"	Stouffville.
"	Thornhill.
"	Toronto.
"	Toronto Junction.
"	Unionville.
"	Vandorf.
"	Weston.
"	Woodbridge.

The above list may be classified as follows:—

Public Libraries reporting	233
Free Libraries reporting	133
Public Libraries not reporting	100
Free Libraries not reporting	16
Public Libraries incorporated since 1st December, 1906	2
Totals	484

I. Public Libraries (not free).

The following extracts are taken from the annual reports for the year ending 31st December, 1906. (For details see Table A).

1. Classification of Public Libraries reporting.

Public Libraries with reading rooms	84
Public Libraries without reading rooms	149
Total	233

2. Public Libraries—Receipts and Balances on Hand.

The total receipts of 233 Public Libraries was	$55,086 01
Balances on hand	7,933 04

3. Public Libraries—Expenditure.

The total expenditure of 233 Public Libraries was	$47,152 97

4. Public Libraries--Assets and Liabilities.

Assets of 233 Public Libraries	$374,196 10
Liabilities of 233 Public Libraries	7,798 54

5. Number of Members in Public Libraries.

233 Public Libraries have 28,138 members.

6. No. of Volumes in Public Libraries and No. of Volumes Issued.

Number of Volumes in 233 Libraries	482,024
No. of Volumes issued in 233 Libraries	653,113

7. Reading Rooms in Public Libraries.

84 Public Libraries reported having reading rooms.
6 Libraries reported having periodicals for circulation.
90 Libraries subscribed for 1,800 newspapers and periodicals.

TABLE A.—Receipts, Expenditures, Assets and Liabilities of Public Libraries (not Free) for the year ending 31st December, 1906.

Number.	Public Libraries.	Receipts.					Expenditure.	Balance on hand.	Number of members.	Number of volumes in library.	Number of volumes issued.	Number of newspapers and periodicals.	Assets.	Liabilities.
		Legislative grants.	Municipal grants.	Members' fees.	Balances and other sources.	Total receipts.								
		$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.					$ c.	$ c.
1	Abington	10 77	.....	.....	1 45	12 22	5 31	6 91	40	319	223	.....	202 36	.....
2	Admaston	10 00	20 00	10 50	10 80	51 30	37 12	14 18	113	1,273	590	.....	670 30	40 00
3	Allan's Mills	4 50	.....	10 06	4 59	19 15	17 46	1 69	105	575	201	.....	375 00	.....
4	Alma	35 85	21 00	34 50	12 23	103 58	98 47	5 11	103	1,400	983	.....	695 00	.....
5	Alliston	8 01	.....	41 90	28 54	78 45	75 14	3 31	102	2,063	2,541	.....	1,583 95	15 00
6	Almonte	45 88	150 00	104 25	18 60	318 73	277 85	40 88	104	3,672	2,770	19	3,970 02	23 14
7	Amherstburg	120 19	150 00	124 70	316 28	711 17	613 09	98 08	236	3,870	3,914	19	8,031 58	.....
8	Angus	.....	15 00	22 95	38 80	76 75	75 84	91	146	626	887	.....	375 00	.....
9	Arthur	54 14	200 00	30 55	150 39	435 08	409 30	25 78	116	3,413	3,423	25	2,335 00	125 00
10	Atwood	.....	25 00	51 35	.....	76 35	76 35	.....	150	1,481	1,370	.....	800 00	45 16
11	Auburn	14 86	30 00	36 65	98 42	179 93	179 93	.....	118	1,131	1,544	8	802 83	84 33
12	Ayton	.....	.....	.....	.....	.....	.....	.....	103	.....	.....	.....	.....	.....
13	Barrie	22 20	200 00	251 00	182 88	656 08	653 62	2 46	252	5,039	10,550	21	5,145 00	598 55
14	Bath	.....	.....	161 00	290 66	451 66	429 91	21 75	171	530	1,858	15	287 8[illegible]	.....
15	Baysville	.....	10 00	8 40	40 26	58 66	52 90	5 76	103	426	869	.....	215 00	.....
16	Beachville	37 27	.....	35 00	272 69	344 96	325 69	19 27	102	1,244	1,424	.....	883 13	.....
17	Beamsville	43 39	25 00	64 15	427 88	560 42	230 76	329 66	106	3,064	4,208	6	2,448 79	.....
18	Beaverton	63 60	49 85	92 63	67 32	273 40	273 30	10	132	1,607	1,996	26	1,367 24	.....
19	Belwood	39 39	25 00	27 90	2 74	95 03	95 03	.....	100	1,735	2,776	.....	1,440 18	.....
20	Bervie	20 00	25 00	3 50	40	48 90	48 90	.....	56	1,631	174	.....	920 00	16 58
21	Blenheim	48 06	189 00	125 25	26 49	388 80	354 82	33 98	172	4,004	4,798	21	3,335 66	60 00
22	Bloomsburg	.....	.....	.....	5 45	5 45	5 12	33	38	195	248	.....	55 00	.....
23	Blyth	10 16	20 00	21 00	95 20	146 36	32 30	114 06	110	1,692	1,803	.....	710 00	.....
24	Bobcaygeon	53 70	75 00	66 45	24 67	219 82	193 40	26 42	131	2,410	3,312	20	2,248 00	.....
25	Bolton	53 33	65 00	64 00	41 70	224 03	222 38	1 65	128	2,557	3,973	22	1,702 56	.....
26	Bowmanville	63 79	125 00	116 20	77 08	382 07	378 21	3 86	105	3,646	4,204	31	2,840 00	.....
27	Bracondale	98 44	25 00	38 70	39 26	201 40	173 81	27 59	189	1,269	3,707	.....	930 80	.....
28	Bradford	11 15	15 00	19 20	34 29	79 64	67 59	12 05	120	2,503	3,009	.....	1,931 37	.....
29	Bridgeburg	10 23	75 00	39 95	61 31	186 52	183 27	3 25	108	1,361	2,762	.....	1,142 61	135 00
30	Brigden	38 38	15 00	28 75	16 10	98 23	90 66	7 57	115	991	1,611	.....	587 06	.....
31	Brooklin	46 97	30 00	29 50	55 42	161 89	131 38	30 51	179	2,393	2,618	.....	1,380 90	.....

32	Brucefield	48 14	35 00	38 75	16 87	138 76	126 55	12 21	100	1,064	1,343	.....	696 04	.....	
33	Bruce Mines	.....	.....	25 75	.....	25 75	17 40	8 35	25	735	601	.....	550 00	6 15	
34	Brownsville	.....	.....	96 15	58 26	154 41	124 75	29 66	129	164	601	.....	104 00	.....	
35	Bunyan	15 55	5 00	8 00	63 52	92 07	73 82	18 25	145	732	661	.....	541 70	.....	
36	Burford	.....	.....	73 40	133 00	206 40	199 88	6 52	107	2,090	2,816	4	1,554 22	90 00	
37	Burlington	46 75	250 00	48 50	1,645 02	1,990 27	1,418 94	571 33	114	2,897	4,059	5	2,197 23	.....	
38	Callander	.....	10 00	32 94	.....	42 94	32 19	10 75	78	423	803	.....	275 00	31 19	
39	Cambray	36 29	50 00	.....	12 75	99 04	92 72	6 32	137	1,215	2,962	.....	874 30	.....	
40	Canfield	9 88	.....	5 00	28 69	43 57	43 50	07	108	795	667	.....	529 43	.....	
41	Cargill	70 09	15 00	26 50	124 26	235 85	70 40	165 45	106	2,244	1,947	.....	1,856 65	.....	
42	Carp	75	25 00	30 00	85 92	141 67	75 00	66 67	100	1,379	1,651	.....	787 98	.....	
43	Chapleau	7 87	.....	209 00	1,836 77	2,053 64	2,025 75	27 89	139	1,905	169	13	6,490 00	3,055 45	
44	Chatsworth	36 70	.....	51 00	44 23	131 93	125 40	6 53	113	2,707	5,594	13	1,940 70	.....	
45	Cheapside	26 68	.....	19 50	42 30	88 48	79 75	8 73	115	1,709	1,204	.....	1,251 99	.....	
46	Claremont	39 32	40 00	26 50	34 80	140 62	137 69	2 93	106	2,769	2,364	.....	2,094 67	.....	
47	Claude	.....	.....	42 50	43 75	86 25	86 25	.....	105	3,105	2,082	.....	2,025 00	22 60	
48	Cobourg	146 17	100 00	191 50	379 66	817 33	703 38	113 95	265	4,273	19,467	39	2,688 95	16 00	
49	Cockburn Island	.....	30 00	14 00	20 00	64 00	51 18	12 82	18	274	194	.....	173 00	33 73	
50	Colborne	.....	.....	55 50	62 57	118 07	118 07	.....	135	1,674	2,215	9	875 00	20 00	
51	Coldstream	.....	10 00	24 56	37 74	72 30	7 50	64 80	103	1,785	2,105	.....	1,012 00	.....	
52	Comber	68 92	98 75	50 00	25 21	242 88	199 19	43 69	100	2,448	2,093	16	1,754 61	.....	
53	Corkery	.....	.....	35 00	363 50	398 50	398 50	.....	144	227	176	.....	210 50	15 19	
54	Dalhousie (McDonalds Corners)	.....	.....	.....	9 28	9 28	3 00	6 28	130	772	526	.....	520 00	.....	
55	Deer Park	200 00	25 00	24 50	54 39	303 89	277 02	26 87	230	909	3,504	.....	730 00	100 00	
56	Dorchester	.....	.....	10 00	137 98	147 98	98 32	49 66	62	1,094	1,088	.....	842 32	.....	
57	Douglas	.....	.....	22 50	45 07	67 57	67 57	.....	105	1,093	346	.....	790 42	.....	.....
58	Drumbo	67 73	5 00	64 75	23 78	161 26	129 72	31 54	103	1,398	2,777	.....	900 00	.....	
59	Dryden	.....	.....	.....	91 42	91 42	53 55	37 87	.....	.....	918	.....	*	*	
60	Duart	.....	.....	10 25	73 07	83 32	45 26	38 06	41	2,736	.....	.....	1,793 09	.....	
61	Dundas	129 26	350 00	191 00	174 24	844 50	834 54	9 96	217	8,192	7,189	38	6,620 48	.....	
62	Dungannon	44 54	20 00	13 45	8 89	86 88	84 27	2 61	134	1,903	2,193	.....	305 02	20 00	
63	Dunville	24 06	100 00	69 00	46 75	239 81	219 94	19 87	110	3,384	6,996	.....	1,969 87	.....	
64	Durham	46 91	100 00	53 05	81 76	281 72	244 61	37 11	105	3,899	4,253	29	3,800 00	.....	
65	Easton's Corners	21 75	....	21 00	24 94	67 69	32 00	35 69	105	1,157	1,851	.....	865 70	.....	
66	East Toronto	101 57	100 00	24 80	28 31	254 68	219 51	35 17	111	1,028	2,458	.....	896 53	.....	
67	Elmvale	.....	.....	29 45	13 05	42 50	42 50	.....	86	1,821	1,337	.....	1,000 00	30 45	
68	Elmwood	29 69	30 00	10 70	32 08	102 47	74 44	28 03	126	860	1,150	.....	473 90	.....	
69	Elora	69 60	144 20	141 05	61 80	416 65	400 39	16 26	149	9,741	7,314	19	7,700 00	52 00	
70	Elphin	.....	.....	.....	14 70	14 70	14 70	.....	25	379	97	.....	200 00	.....	
71	Embro	69 53	35 00	77 35	45 81	227 69	210 63	17 06	105	5,617	5,557	14	4,572 64	.....	
72	Ennotville	60 00	25 00	13 50	83 42	181 92	157 70	24 22	180	3,355	731	.....	2,920 00	.....	
73	Essex	59 33	175 00	66 50	150 60	451 43	436 64	14 79	158	3,043	2,870	30	2,801 00	.....	
74	Ethel	7 54	5 00	13 00	34 82	60 36	37 91	22 45	32	1,995	1,750	.....	600 00	.....	

* Not reported.

TABLE A.—Receipts, Expenditures, Assets and Liabilities, etc.—*Continued.*

Number.	Public Libraries.	Receipts.					Expenditure.	Balance on hand.	Number of members.	Number of volumes in library.	Number of volumes issued	Number of newspapers and periodicals.	Assets.	Liabilities.
		Legislative grants.	Municipal grants.	Members' fees.	Balance and other sources.	Total receipts.								
		$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.					$ c.	$ c.
75	Fenelon Falls	43 74	125 00	86 50	119 43	374 67	275 87	98 80	110	3,940	3,389	37	2,890 00	50 85
76	Fergus	54 46	150 00	76 00	18 23	298 69	265 18	33 51	137	5,520	3,728	17	6,199 00	.... ..
77	Fonthill	33 61	50 00	32 25	42 51	158 37	130 75	27 62	160	2,762	1,826	12	2,642 79	.....
78	Forester's Falls	25 38	15 00	36 15	15 45	91 98	91 59	39	107	765	1,920	.....	397 00	.....
79	Fort Erie	21 67	100 00	21 75	28 72	172 14	154 81	17 33	102	2,996	3,618	.....	1,875 00	5 15
80	Fort William	.....	.....	105 00	374 15	479 15	472 92	6 23	105	2,350	409	36	2,396 77	.....
81	Frankford	82 27	.....	100 25	193 18	375 70	305 99	69 71	107	263	1,378	14	189 11	5 92
82	Gananoque	147 39	250 00	253 80	85 40	736 59	697 83	38 76	215	3,956	9,861	20	3,200 52	25 74
83	Glamis	.....	35 00	6 50	13 05	54 55	52 10	2 45	26	737	516	.....	424 95	.....
84	Glen Allan	24 92	20 00	20 00	44 81	109 73	79 39	30 34	105	1,260	936	.....	1,013 82	.....
85	Glenmorris	38 81	50 00	29 20	35 87	153 88	95 38	58 50	100	2,535	990	12	1,865 00	.. ..
86	Gore's Landing	20 31	.....	30 05	36 73	87 09	86 00	1 09	112	1,187	783	*	1,021 55	.....
87	Grafton	.....	.....	38 00	144 95	182 95	163 68	19 27	101	188	450	5	177 58	44 04
88	Haliburton	34 94	35 00	25 25	21 19	116 38	108 28	8 10	101	996	1,678	.....	492 00	4 00
89	Hanover	12 22	.....	5 50	11 90	29 62	12 67	16 95	73	934	468	.....	678 72	25 00
90	Harrington	25 62	.....	31 50	14 33	71 45	61 89	9 56	103	984	2,081	.....	408 00	.....
91	Harrow	.....	60 00	37 25	50 45	147 70	130 51	17 19	100	1,100	2,641	16	544 40	.....
92	Hawkesbury	38 39	.....	76 50	101 56	216 45	213 35	3 10	102	699	1,654	.....	410 06	72 00
93	Hawkesville	.....	25 00	13 30	2 40	40 70	40 70	.....	112	846	1,061	.....	392 65	25
94	Highland Creek	21 42	.....	13 00	66 13	100 55	87 15	13 40	102	1,511	1,080	.....	1,282 10	.....
95	Hillsdale	37 37	.....	68 00	46 88	152 25	134 36	17 89	108	1,108	1,905	.....	641 32	40 00
96	Holstein	51 24	.....	48 90	255 00	355 14	336 75	18 39	151	1,182	3,051	.....	814 79	.....
97	Honeywood	29 80	.....	26 50	52 01	108 31	48 80	59 51	104	487	744	10	200 00	14 00
98	Huntsville	66 85	175 00	70 50	3 96	316 31	284 32	31 99	115	3,348	6,645	16	2,340 00	.....
99	Inglewood	.....	15 00	23 80	.....	38 80	38 80	.....	101	1,833	943	.....	564 90	2 50
100	Islington	40 55	.....	46 40	48	87 43	87 25	18	139	1,907	2,155	7	1,070 35	.....
101	Jarvis	28 40	.....	88 50	72 00	188 90	188 25	65	107	3,184	1,621	19	1,550 00	130 75
102	Kemble	.....	.....	22 05	93 81	115 86	99 79	16 07	107	1,005	1,038	.....	695 60	.....
103	Kinburn	.....	.....	5 75	.....	5 75	5 75	.....	12	1,573	290	.....	*	24 00
104	Kingston	107 44	500 00	230 60	149 19	987 23	844 54	142 69	300	6,153	29,097	13	6,542 00	.....

105	Kinmount	44 74	50 00	37 50	5 53	137 77	111 25	26 52	102	1,762	2,975	.....	1,323 67	.....		
106	Kirkfield	42 34	50 00	31 00	37 20	160 54	116 04	44 50	109	1,732	1,339	.....	1,100 33	.....		
107	Komoka	34 43	10 00	63 25	60	108 28	107 95	33	118	532	716	.....	358 31	.....		
108	Lake Charles	.....	.....	25 00	25 00	50 00	50 00	.....	100	2,188	972	.....	1,490 08	.....		
109	Lefroy	42 69	.....	41 90	24 36	108 95	102 71	6 24	141	657	2,912	.....	125 00	30 00		
110	Little Britain	48 10	50 00	29 00	85 90	213 00	190 67	22 33	147	2,259	2,473	19	1,942 10	.....		
111	Lucknow	36 51	115 00	32 40	32 22	216 13	207 67	8 46	253	3,113	2,957	.....	1,600 00	.....		
112	Madoc	108 77	25 00	89 65	68 09	291 51	291 51	.....	142	2,279	5,523	.....	1,603 00	52 34		
113	Mallorytown	.....	.....	20 00	.....	20 00	20 00	.....	51	1,392	1,843	.....	1,025 44	50 79		
114	Manilla	61 65	50 00	17 75	129 01	258 41	258 15	26	101	3,042	1,476	.....	2,290 45	.. ....		
115	Manitowaning	.....	.....	27 50	305 12	332 62	328 29	4 33	52	370	.....	.....	260 00	12 21		
116	Manotick	19 22	.....	22 10	23 28	64 60	64 60	.....	114	1,830	1,852	.....	1,230 89	23 28		
117	Maple	33 15	25 00	8 75	25 98	92 88	82 62	10 26	126	838	1,845	.....	600 72	.....		
118	Markham	57 74	.....	60 00	215 62	333 36	148 60	184 76	240	3,309	6,336	.....	2,634 76	.....		
119	Meaford	53 66	125 00	110 41	126 04	415 11	415 11	.....	220	3,265	4,327	10	2,250 00	.....		
120	Middleville	.....	.....	11 50	12 37	23 87	12 03	11 84	46	675	397	.....	325 00	.....		
121	Metcalfe	.....	.....	20 00	.....	20 00	20 00	.....	40	680	517	.....	555 00	.....		
122	Mildmay	28 35	30 00	14 70	73	73 78	62 91	10 87	160	2,200	1,254	.....	885 00	8 30		
123	Millgrove	13 25	.....	5 50	17 20	35 95	20 53	15 42	105	579	1,099	2	356 45	.....		
124	Milton	32 20	.....	63 25	136 32	231 77	230 04	1 73	175	3,435	3,085	29	4,400 00	.....		
125	Minden	30 64	25 00	27 00	7 34	89 98	83 20	6 78	104	1,370	2,006	.....	1,036 99	24 00		
126	Monkton	.....	23 00	33 60	2 90	59 50	32 10	27 40	103	1,488	1,200	.....	1,000 00	.....		
127	Mono Road	11 14	20 00	28 25	22 78	82 17	70 18	11 99	112	1,834	2,351	.....	1,055 00	.....		
128	Morrisburg	79 43	75 00	138 25	82 45	375 13	375 13	.....	126	2,938	3,647	32	1,475 00	73 07		
129	Morriston	8 50	.....	33 25	22 57	64 32	64 05	27	104	1,312	1,708	2	784 75	.....		
130	Mount Albert	.....	25 00	6 85	13 33	45 18	25 63	19 55	106	868	1,637	.....	635 80	.....		
131	Mount Brydges	.....	20 00	27 75	15 36	63 11	62 90	21	44	921	1,221	.....	540 00	31 30		
132	Mount Forest	44 20	75 00	33 19	640 74	793 13	288 88	504 25	102	3,202	4,335	13	3,230 86	.....		
133	Nanticoke	.....	.....	19 00	31 81	50 81	50 81	.....	107	2,052	1,422	.....	1,462 55	2 66		
134	Napanee	210 43	250 00	243 00	103 91	807 34	641 95	165 39	218	5,135	11,100	41	4,040 39	.....		
135	Newboro'	.....	.....	22 00	15 76	37 76	27 63	10 13	50	435	255	.....	329 22	25 00		
136	Newburgh	18 22	40 00	25 87	196 73	280 82	190 51	90 31	140	2,086	827	16	1,227 00	55 00		
137	New Dundee	.....	60 00	7 95	12 40	80 35	35 95	44 40	46	720	558	.....	475 44	.....		
138	New Durham	72 37	.....	21 25	63 57	157 19	128 27	28 92	104	1,043	744	.....	551 68	.....		
139	New Hamburg	29 07	180 00	10 70	19 99	239 76	144 04	95 72	*	3,205	4,207	.....	2,272 44	73 00		
140	Niagara	96 31	75 00	155 15	1 80	328 26	325 19	3 07	121	6,282	7,717	27	5,612 88	12 61		
141	Norland	.....	.....	11 50	2 25	13 75	8 60	5 15	45	563	758	.....	450 40	106 42		
142	North Gower	25 64	.....	28 50	41 33	95 47	80 54	14 93	106	2,052	2,115	.....	765 00	.....		
143	Norwich	55 33	50 00	93 40	1 16	199 89	195 07	4 82	115	2,111	3,862	14	1360 00	.....		
144	Norwood	12 97	50 00	42 25	7 05	112 27	111 92	35	149	2,391	2,215	9	1367 04	35 40		
145	Oakville	42 83	200 00	124 25	268 62	635 70	503 50	132 20	162	3,742	4,142	16	2695 00	21 00		
146	Oakwood	27 45	78 31	22 25	6 35	134 36	112 62	21 74	107	1,691	1,378	17	1074 73	42 75		
147	Odessa	31 07	.....	25 25	110 66	166 98	166 98	.....	113	1,146	1,719	14	559 41	18 09		

* Not reported.

TABLE A.—Receipts, Expenditures, Assets and Liabilities, etc.—*Continued.*

Number.	Public Libraries.	Receipts.					Expenditure.	Balance on hand.	Number of members.	Number of volumes in library.	Number of volumes issued.	Number of newspapers and periodicals.	Assets.	Liabilities.
		Legislative grants.	Municipal grants.	Members' Fees.	Balance and other sources.	Total receipts.								
		$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
148	Omemee	34 41	100 00	56 10	266 85	457 36	457 36	.....	1 14	8 99	8 24	22	657 35	.....
149	Orillia	104 34	174 00	283 00	18 65	579 99	578 08	1 91	2 94	45 50	95 23	23	4,725 00	100 00
150	Orono	31 73	.....	45 85	28 36	105 94	65 19	40 75	1 05	13 76	17 56	... .	1,166 74	65 00
151	Owen Sound	79 03	200 00	187 50	10 79	477 32	462 19	15 13	1 95	73 03	82 02	24	5,000 00	.....
152	Oxford Mills	8 01	.....	17 00	18 99	44 00	44 00	.....	62	14 59	11 72	.....	1,028 22	.....
153	Pakenham	.....	15 00	23 54	52 83	91 37	47 44	43 93	43	3 91	10 46	.....	300 00	.....
154	Peterborough	211 31	.....	500 64	740 25	1,452 20	845 89	606 31	4 15	106 16	142 83	89	12,944 68	390 00
155	Petrolea	18 41	.....	66 92	17 71	103 04	103 04	.....	1 03	10 85	20 17	.....	824 94	50 00
156	Pickering	25 90	40 00	49 40	41 98	157 28	137 48	19 80	1 00	18 97	23 04	18	1,074 14	.....
157	Pinkerton	21 08	3 75	25 00	21 39	71 22	64 52	6 70	1 00	17 02	10 28	.....	1,222 23	.....
158	Plattsville	31 04	10 00	43 00	195 75	279 79	235 26	44 53	1 26	14 56	33 20	.....	996 74	.....
159	Point Edward	.....	.....	56 25	82 08	138 33	122 93	15 40	1 09	30 06	28 20	.....	4,075 29	.....
160	Poland	.....	.....	.....	13 00	13 00	10 00	3 00	35	8 32	15 37	.....	465 00	.....
161	Port Arthur	139 89	735 80	218 50	40 39	1,134 58	1,111 94	22 64	3 38	30 06	80 79	27	3,862 98	.....
162	Port Credit	17 74	20 00	30 00	42 59	110 33	104 30	6 03	1 07	18 83	14 00	.....	1,232 20	.....
163	Port Dover	.....	.....	126 50	77 95	204 45	180 37	24 08	1 36	11 60	25 71	16	729 93	.....
164	Port Elgin	23 28	15 00	46 15	69 69	154 12	107 65	46 47	1 02	31 80	33 16	20	2,025 00	.....
165	Port Hope	77 76	.....	286 40	220 76	584 92	578 91	6 01	2 28	47 02	94 70	37	3,700 00	.....
166	Port Perry	59 40	80 00	105 25	27 94	272 59	272 59	.....	1 46	22 89	37 19	31	1,125 00	6 64
167	Port Stanley	22 95	25 00	39 80	1 54	89 29	89 03	26	1 05	13 61	18 54	.....	1,030 00	.....
168	Priceville	.....	.....	13 50	81 44	94 94	81 34	13 60	55	3 40	1 75	.....	207 79	22 50
169	Princeton	22 43	.....	36 90	18 41	77 74	26 50	51 24	83	20 52	20 07	.....	1,500 00	.....
170	Queensville	27 50	25 00	11 25	16 00	79 75	77 20	2 55	1 56	21 18	27 36	.....	1,368 92	95
171	Rat Portage (Kenora)	123 04	300 00	133 50	1,508 73	2,065 27	2,044 69	20 58	1 28	44 68	46 41	35	3,285 59	391 20
172	Richmond	18 18	.....	42 50	12 87	73 55	73 55	.....	1 05	15 83	13 21	.....	1,216 83	1 96
173	Ridgetown	61 47	65 00	105 00	95 90	327 37	283 72	43 65	1 08	41 13	40 75	35	4,876 00	.....
174	Ripley	.....	30 00	20 00	387 77	437 77	270 89	166 88	80	20 00	35 68	.....	1,250 00	.....
175	Riversdale	18 58	10 00	5 85	25 05	59 48	55 45	4 03	1 20	11 07	13 50	.....	750 98	.....
176	Rockwood	40 78	.....	44 75	82 56	168 09	154 71	13 38	1 02	17 24	24 03	17	579 00	.....
177	Rodney	33 55	30 00	38 50	5 45	107 50	107 00	50	1 40	12 41	20 69	.....	1,241 79	10 00
178	Romney	40 12	35 00	26 70	15 86	117 68	87 24	30 44	1 00	26 93	13 49	.....	2,096 68	36 00

179	Rosseau		15 00	13 10	6 77	34 87	34 87		58	5 47	4 33		232 50	14 99
180	Russell	46 65	25 00	59 60	53 54	184 79	166 19	18 60	1 26	18 26	19 70	27	2862 37	220 00
181	Saltfleet (Stoney Creek P. O.)	55 53	50 00	33 00	39 68	178 21	159 75	18 46	1 37	13 17	23 38		1,221 07	
182	Sault Ste. Marie	153 88	600 00	129 50	281 46	1,164 84	822 77	342 07	6 75	30 43	155 07	25	1,200 00	
183	Scarboro'	57 14		94 03	13 69	164 86	156 04	8 82	1 02	58 41	28 45		4,142 00	
184	Schomberg	50 00	15 00	37 14	45	102 59	98 61	3 98	1 02	2 34	16 68		186 11	
185	Scotland	26 28		53 45	148 85	228 58	186 55	42 03	1 35	14 30	22 30	22	1,047 78	
186	Shakespeare			11 50	81 66	93 16	89 55	3 61	42	15 89	15 35	6	1,037 60	50 00
187	Shedden	29 38		53 50	15 27	98 15	87 17	10 98	1 06	15 27	16 10		794 60	
188	Singhampton		19 75	64 50	69 32	153 57	151 30	2 27	1 20	2 47	14 43		204 42	
189	Smithville	9 30	40 00	50 00	78 85	178 15	149 93	28 22	1 27	11 15	26 49		915 00	
190	Southampton	28 58	15 00	44 00	66 48	154 06	111 64	42 42	1 31	31 38	21 19		4,380 02	
191	South Mountain	75 99		47 00	140 31	263 30	263 30		1 13	4 36	15 21		323 75	
192	South River			18 94	76 88	95 82	58 92	36 90	1 02	9 60	24 80		742 17	
193	Sparta	23 18	50 00	34 00	51 73	158 91	126 23	32 68	1 02	25 61	27 15		1,994 56	
194	Speedside	59 79		13 85	75 08	148 72	112 12	36 60	1 05	4 54	10 71		335 05	
195	Springfield			10 00	21 25	31 25	27 65	3 60	40	15 00	3 00		900 00	
196	Strathroy	133 65	100 00	190 25	167 71	591 61	591 61		2 88	67 88	256 52	25	6,075 00	1 96
197	Sturgeon Falls	75 27		66 60	131 34	273 21	232 42	40 79	1 00	3 85	17 39		224 00	
198	St. George	20 83		71 75	232 10	324 68	276 33	48 35	1 30	48 92	37 57	9	5,608 79	
199	St. Helen's	21 10	25 00	22 56	51 81	120 47	108 63	11 84	1 03	18 24	10 12		1,380 00	
200	Sunderland	73 05	40 00	7 25	24 95	145 25	134 19	11 06	1 20	30 02	11 22	25	1,600 00	
201	Sydenham	56 72	25 00	150 60	9 63	241 95	229 86	12 09	1 13	9 82	47 88	18	525 00	
202	Tavistock	122 69		78 75	423 46	624 90	393 71	231 19	1 11	38 29	39 04	23	2,385 90	
203	Teeswater	94 84		93 75	259 21	447 80	317 80	130 00	2 01	43 38	49 22	17	2,250 00	
204	Thamesford	10 08	20 00	37 75	54 24	122 07	116 76	5 31	1 00	18 80	24 95	12	1,404 35	
205	Thamesville	27 38	50 00	90 50	138 54	306 42	272 30	34 12	1 01	36 21	33 23	16	3,195 00	185 00
206	Thedford	39 34		54 25	1 09	94 68	79 06	15 62	1 09	23 52	40 41		1,215 00	
207	Thornbury	19 11		21 70	35 99	76 80	76 19	61	1 36	13 94	28 13		530 00	9 03
208	Tilbury	42 37	100 00	54 50	6 00	202 87	199 09	3 78	1 02	20 57	40 41	14	1,492 90	
209	Tillsonburg	65 99	150 00	124 00	155 77	495 76	495 76		1 34	30 07	65 80	20	2,100 00	122 61
210	Toronto Junction	87 34	400 00	174 50	250 44	912 28	693 47	218 81	2 17	39 73	53 39	36	2,900 00	
211	Trout Creek			7 11		7 11	7 11		20	13 19	10 87		1,018 84	
212	Tweed		25 00	231 30	128 90	385 20	352 47	32 73	1 70	3 93	25 61		317 78	
213	Underwood	40 12	35 00	38 25	89	114 26	113 36	90	1 42	26 71	31 27		1,158 46	
214	Unionville	40 15	30 00	25 88	11 21	107 24	100 98	6 26	1 11	8 79	22 64		625 00	
215	Vankleek Hill	43 58		75 00	28 11	146 69	138 22	8 47	1 00	13 15	15 05	1	1,191 24	
216	Victoria (Caledonia P. O.)			12 50	61 62	74 12	69 83	4 29	1 00	26 46	11 99		1,923 57	
217	Victoria Mines	59 41	25 00	31 00	15 82	131 23	68 57	62 66	1 09	4 66	10 09		340 00	
218	Walkerton	78 60	215 00	91 00	60 72	445 32	444 04	1 28	1 08	35 51	47 96	17	1,978 00	6 90
219	Walton	13 45	15 00	28 00	19 96	76 41	72 17	4 24	1 06	1131	17 10	11	285 00	110 45

* Not reported. † Two years' Report. ** Books destroyed by fire, 10th April 1905.

TABLE A.—Receipts, Expenditures, Assets and Liabilities, etc.—*Continued.*

Number.	Public Libraries.	Receipts.					Expenditure.	Balance on hand.	Number of members.	Number of volumes in library.	Number of volumes issued.	Number of newspapers and periodicals.	Assets.	Liabilities.
		Legislative grants.	Municipal grants.	Members' fees.	Balances and other sources.	Total receipts.								
		$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	*		*		$ c.	$ c.
220	Wardsville	.....	30 00	3 65	7 10	40 75	24 00	16 75	.....	1,394	.....	.....	925 00	.....
221	Warkworth	.....	35 00	50 00	117 67	202 67	163 39	39 28	112	1,160	709	19	720 00	197 34
222	Waterdown	30 88	25 00	22 50	8 19	86 57	86 02	55	165	1,612	3,088	.....	527 24	.....
223	Welland	92 19	200 00	81 65	70 27	444 11	353 51	90 60	181	4,181	4,980	36	4,815 70	.....
224	Wellesley	45 78	25 00	26 00	102 10	198 88	166 64	32 24	139	1,862	3,082	.....	1,334 91	.....
225	Westport	.....	.....	57 00	.....	57 00	57 00	.....	100	600	764	.....	300 00	.....
226	Weston	71 64	60 00	57 50	54 71	243 85	177 93	65 92	131	3,479	4,806	30	2,433 00	.....
227	Whitby	62 25	25 00	80 25	180 64	348 14	328 08	20 06	103	3,579	5,802	.....	2,250 00	.....
228	White Lake	.....	.....	.....	39 68	39 68	6 25	33 43	100	827	1,807	.....	280 00	.....
229	Williamstown	29 51	35 00	26 50	72 46	163 47	113 47	50 00	117	1,861	1,687	.....	1,573 01	.....
230	Winchester	55 72	50 00	117 55	31 40	254 67	250 42	4 25	241	848	2,858	16	898 00	.....
231	Woodbridge	29 86	.....	25 00	56 17	111 03	88 83	22 20	109	2,007	1,326	5	1,771 28	.....
232	Woodville	27 77	50 00	42 30	49 07	169 14	139 46	29 68	118	2,419	2,897	19	1,225 00	.....
233	York	.....	30 00	.....	39 07	69 07	69 07	.....	16	1,000	1,115	.....	637 00	28 57
	Totals	8,406 38	11,307 41	13,021 27	22,350 95	55,086 01	47,152 97	7,933 04	281 38	482,024	6,531 13	1,800	374,196 10	7,798 54

* Not reported.

II. Public Libraries, Free.

The following extracts are taken from the annual reports for the year ending 31st December, 1906. (For details see Table B.)

1. Classification of Free Libraries Reporting.

Free Libraries, with reading rooms	92
Free Libraries without reading rooms	41
Total	133

2. Free Libraries—Receipts and Balances on Hand.

The total receipts of 133 Free Libraries	$179,457 66
Balances on hand	13,269 32

3. Free Libraries—Expenditure.

The total expenditure of 133 Free Libraries	$166,188 34

4. Free Libraries—Assets and Liabilities.

Assets of 133 Free Libraries	$1,392,200 41
Liabilities of 133 Free Libraries	136,156 62

5. Number of Readers in Free Libraries.

133 Free Libraries report having had 155,086 readers.

6. No. of Volumes in Free Libraries, and No. of Volumes Issued.

Number of volumes in 133 Free Libraries	727,368
Number of volumes issued in 133 Free Libraries	1,882,986

7. Reading Rooms in Free Libraries.

92 Free Libraries reported having reading rooms.
24 Free Libraries subscribed for 4,316 newspapers and periodicals.

TABLE B.—Receipts, Expenditures, Assets and Liabilities of Public Libraries (Free) for the year ending 31st December, 1906.

Number.	Free Libraries.	Receipts.					Expenditure.	Balance on hand.	Number of members.	Number of volumes in Library.	Number of volumes issued.	Number of newspapers and periodicals.	Assets.	Liabilities.
		Legislative grants.	Municipal grants.	Members' fees.	Balances and other sources.	Total receipts.								
		$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.					$ c.	$ c.
1	Acton	54 30	134 34	.....	28 28	216 92	202 32	14 60	178	2,356	3,505	.....	2,475 40	.....
2	Ailsa Craig	62 59	50 00	7 20	84 99	204 78	117 42	87 36	134	2,839	1,672	.....	2,080 02	.....
3	Alton	55 55	15 00	10 50	100 30	181 35	167 29	14 06	187	4,733	4,309	.....	4,826 82	.....
4	Arnprior	23 79	100 00	.....	101 66	225 45	159 47	65 98	184	2,613	3,879	.....	1,415 98	.....
5	Aurora	46 59	150 00	.....	489 08	685 67	674 88	10 79	378	3,189	7,571	.....	3,887 79	983 50
6	Aylmer	106 16	325 00	7 30	76 21	514 67	501 21	13 46	584	4,669	12,139	31	4,200 00	.....
7	Ayr	45 34	170 00	3 55	37 50	256 39	255 07	1 32	315	3,340	6,014	26	1,800 00	3 75
8	Belfountain	.....	15 00	4 00	30 00	49 00	34 00	15 00	75	1,400	1,100	.....	800 00	.....
9	Belleville	250 00	1,000 00	.....	325 93	1,575 93	1,529 50	46 43	2,366	6,714	35,262	54	5,400 00	.....
10	Berlin	250 00	2,377 64	.....	69 72	2,697 36	2,580 85	116 51	901	8,437	14,799	83	8,837 59	.....
11	Bothwell	69 10	150 00	.....	79 32	298 42	241 22	57 20	170	2,542	4,501	.....	1,675 00	.....
12	Bracebridge	147 30	560 67	31 52	210 42	949 91	616 08	333 83	465	3,808	9,533	24	3,112 31	.....
13	Brampton	148 34	525 00	2 50	84 66	760 50	655 18	105 32	451	4,912	13,133	23	3,250 00	.....
14	Brantford	244 66	4,236 00	10 00	563 37	5,054 03	5,054 03	.....	3,957	20,895	92,936	116	57,500 00	360 82
15	Brighton	24 95	195 00	.....	68 26	288 21	286 15	2 06	265	3,215	4,733	25	1,602 06	.....
16	Brockville	177 94	1,200 00	24 25	295 12	1,697 31	1,684 74	12 57	2,980	11,193	40,018	66	22,700 00	.....
17	Brussels	95 18	206 50	.....	95 74	397 42	365 38	32 04	208	3,401	3,762	21	2,100 00	.....
18	Burk's Falls	94 46	150 00	.....	29 04	273 50	269 92	3 58	367	2,671	3,185	21	1,150 00	.....
19	Caledon	24 72	15 00	4 60	78 77	123 09	120 19	2 90	150	3,359	1,849	.....	2,771 63	.....
20	Camden East	33 07	90 00	1 25	.....	124 32	86 48	37 84	248	1,980	1,996	14	1,101 57	177 79
21	Cardinal	30 12	150 00	1 00	61 18	242 30	207 72	34 58	195	4,908	2,943	13	1,100 00	.....
22	Carleton Place	111 76	300 00	.....	309 08	720 84	525 08	195 76	304	4,678	7,801	22	3,500 00	.....
23	Chatham	114 05	1,673 04	.....	215 68	2,002 77	1,815 04	187 73	1,055	6,965	25,519	37	26,035 99	.....
24	Chesley	73 84	200 00	4 88	122 72	401 44	313 66	87 78	225	2,107	5,529	18	970 00	.....
25	Chesterville	50 56	50 00	.....	.....	100 56	91 50	9 06	315	1,778	5,983	.....	1,571 59	.....
26	Clifford	73 23	100 00	9 30	15 77	198 30	198 30	.....	223	4,030	2,038	.....	2,188 99	15 77
27	Clinton	156 83	165 00	.....	337 33	659 16	652 29	6 87	780	5,497	13,454	47	14,225 00	.....
28	Cobden	10 61	107 00	7 55	43 84	169 03	55 95	113 08	147	819	990	.....	742 02	12 45
29	Collinwood	147 95	1,450 00	.....	315 44	1,913 39	1,862 52	50 87	610	5,885	11,511	45	22,844 47	102 50
30	Cornwall	100 93	600 00	.....	135 42	836 35	836 35	.....	977	3,979	15,667	45	11,100 00	99 31
31	Creemore	11 68	30 00	4 00	7 01	52 69	46 58	6 11	100	1,295	1,000	.....	500 00	.....
32	Delhi	32 92	125 00	.....	70 14	228 06	209 82	18 24	211	1,845	3,001	18	1,364 43	.....

33	Deseronto	125 06	600 00	4 00	94 30	823 36	733 59	89 77	802	5,092	27,861	43	3,045 00	.....	
34	Don	25 09	25 00	3 25	36 91	90 25	81 92	8 33	103	1,244	1,244	.....	876 42	.....	
35	Drayton	26 38	150 00	4 75	213 44	394 57	371 14	23 43	206	3,108	3,670	15	1,364 00	101 05	
36	Dutton	43 18	100 00	41 10	171 62	355 90	253 18	102 72	147	2,006	2,147	12	1,634 29	.....	
37	Elmira	43 08	255 00	.....	100 54	398 62	347 20	51 42	164	2,502	3,140	20	2,169 00	.....	
38	Erin	25 71	65 00	2 40	23 55	116 66	113 68	2 98	162	2,138	3,939	.....	1,543 84	.....	
39	Exeter	111 15	115 00	30 00	23 84	279 99	260 53	19 46	508	4,762	10,287	22	2,615 00	.....	...
40	Forest	70 55	200 00	.....	98 08	368 63	309 31	59 32	470	4,022	10,356	18	3,400 00	56 60	
41	Galt	250 00	2,080 00	.....	98 40	2,428 40	2,394 68	33 72	1,883	6,886	34,861	67	33,000 00	1000 00	
42	Garden Island	119 21	250 00	47 00	150 74	566 95	566 95	.....	127	6,340	1,814	34	4,068 89	32 59	
43	Georgetown	77 37	200 00	7 00	160 38	444 75	343 76	100 99	275	3,233	9,531	24	2,582 91	.....	
44	Goderich	96 97	690 00	.....	342 53	1,129 50	886 77	242 73	750	4,247	13,499	41	11,750 00	.....	
45	Gore Bay	... .	125 00	.....	115 91	240 91	186 46	54 45	134	1,362	1,665	.....	934 09	.....	
46	Grand Valley	47 30	197 19	.....	78 53	323 02	259 81	63 21	202	2,777	3,415	16	1,675 00	.....	
47	Grantham (St. Catharines P.O.)	48 22	75 00	.....	102 86	226 08	167 16	58 92	279	2,597	2,430	.....	1,695 00	.....	
48	Gravenhurst	37 35	100 00	.....	43 81	181 16	171 62	9 54	304	2,318	4,896	.....	1,139 54	8 50	
49	Grimsby	84 08	400 00	.....	29 14	513 22	493 01	20 21	770	5,057	16,772	33	4,020 21	.....	
50	Guelph	250 00	2,000 00	.....	417 07	2,667 07	2,429 88	237 19	1,750	12,580	63,582	55	36,500 00	200 00	
51	Hagersville	14 95	129 12	12 25	27 94	184 26	170 24	14 02	104	2,135	1,259	13	1,548 00	... .	
52	Hamilton	250 00	15,500 00	.....	1,247 54	16,997 54	16,974 74	22 80	16,400	30,623	164,024	234	76,400 00	10,790 00	
53	Harriston	83 45	225 00	6 75	68 84	384 04	355 25	28 79	465	4,882	8,206	40	3,180 00	.....	
54	Hensall	....	108 93	.....	59 36	168 29	89 56	78 73	207	1,563	3,243	.....	1,215 21	.....	
55	Hespeler	99 97	265 00	3 00	127 73	495 70	376 24	119 46	400	3,718	9,606	28	2,750 00	.....	
56	Ingersoll	110 28	600 00	.....	148 55	858 83	784 09	74 74	760	4,835	17,466	26	2,400 00	... .	
57	Kemptville	72 19	309 00	.....	180 63	561 82	513 90	47 92	325	1,836	7,882	23	1,460 17	11 00	
58	Kincardine	54 36	315 00	.....	102 46	471 82	444 28	27 54	420	3,625	10,348	45	2,815 00	.....	
59	Kingsville	107 95	250 00	.....	115 85	473 80	379 52	94 28	215	2,293	4,995	25	1,744 28	60 00	
60	Lakefield	53 54	100 00	4 00	18 67	176 21	175 36	85	154	1,462	2,608	22	650 00	15 59	
61	Lanark	.....	46 58	.....	94 83	141 41	126 00	15 41	199	1,799	2,631	.....	1,275 00	.....	
62	Lancaster	53 62	46 04	.....	10 50	110 16	92 66	17 50	216	3,499	2,344	6	5,034 80	....	
63	Leamington	109 05	350 00	.....	71 39	530 44	431 06	99 38	428	2,321	6,475	27	1,750 00	.....	
64	Lindsay	249 66	1,108 83	14 50	146 22	1,519 21	1,519 21	.....	848	5,255	21,880	64	17,225 88	241 24	
65	Listowel	67 65	400 00	57 17	19 47	544 29	485 50	58 79	800	3,548	7,882	2	1,650 00	.....	
66	Little Current	13 73	50 00	.....	9 89	73 62	43 00	30 62	225	1,559	3,322	.....	805 00	.....	
67	London	250 00	7,722 00	.....	1,748 79	9,720 79	8,047 70	1,673 09	7,238	19,240	67,444	142	63,487 48	29,000 00	
68	Markdale	70 18	125 00	.....	19 75	214 93	203 60	11 33	137	3,040	2,829	18	2,860 00	.....	
69	Marlbank	39 15	.....	.....	42 60	81 75	76 75	5 00	300	769	1,190	16	606 88	.....	
70	Matilda (Iroquois P.O.)	19 05	.....	.....	13 24	32 29	32 29	.....	208	468	9,499	.....	325 02	.....	
71	Merrickville	49 79	200 00	6 35	218 24	474 38	376 15	98 23	171	3,093	3,678	.....	2,597 13	96 75	
72	Merritton	27 19	125 00	.....	54 63	206 82	129 10	77 72	501	2,141	4,535	.....	1,458 14	.....	
73	Midland	82 16	395 00	.....	42 30	519 46	488 05	31 41	618	3,299	10,326	32	1,749 00	.....	
74	Millbrook	66 84	175 00	.....	251 43	493 27	346 46	146 81	206	2,272	7,538	30	1,746 81	250 00	
75	Milverton	46 59	75 00	.....	104 95	226 54	176 38	50 16	249	2,512	3,611	.....	1,959 50	.....	

TABLE B.—Receipts, Expenditures, Assets and Liabilities of Public Libraries (Free), etc.—*Continued.*

Number.	Free Libraries.	Receipts.					Expenditure.	Balance on hand.	Number of members.	Number of volumes in Library.	Number of volumes issued.	Number of newspapers and periodicals.	Assets.	Liabilities.
		Legislative grants.	Municipal grants.	Members' fees.	Balances and other sources.	Total receipts.								
		$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.					$ c.	$ c.
76	Mitchell	89 26	335 00	15 70	129 64	569 60	421 09	148 51	224	4,300	9,714	22	5,258 78	.....
77	Napanee Mills (Strathcona P.O.)	.....	.....	.....	985 85	985 85	110 20	875 65	103	1,316	1,431	9	1,025 00	.....
78	Newmarket	47 78	275 00	8 05	18 16	348 99	313 16	35 83	740	2,497	10,907	25	1,214 85	.....
79	Niagara Falls	184 21	1,072 40	.....	155 76	1,412 37	1,406 50	5 87	.....	8,272	26,234	41	7,800 00	.....
80	North Bay	40 23	250 00	.....	21 86	312 09	305 49	6 60	370	2,321	5,571	14	1,750 00	.....
81	Orangeville	123 03	488 45	.....	133 74	745 22	609 23	135 99	320	4,257	6,856	37	3,923 00	.....
82	Oshawa	117 53	725 00	.....	117 65	960 18	820 11	140 07	1,160	4,913	13,291	39	2,250 00	.....
83	Ottawa	.....	9,500 00	.....	2,831 07	12,331 07	12,206 07	125 00	12,106	17,580	73,899	153	145,000 00	40,000 00
84	Otterville	.....	49 50	.....	20 44	69 94	69 94	.....	167	922	1,206	.....	510 72	1 59
85	Paisley	72 93	165 00	24 30	9 94	272 17	267 79	4 38	305	7,418	4,976	24	3,100 00	.....
86	Palmerston	.....	560 00	23 20	250 92	834 12	813 98	20 14	418	2,438	6,622	21	13,350 00	275 00
87	Paris	125 82	800 00	.....	279 80	1,205 62	1,096 41	109 21	671	6,840	11,078	38	14,000 00	.....
88	Parkhill	41 40	.....	.....	76 85	118 25	93 39	24 86	395	2,327	3,038	.....	1,299 86	.....
89	Parry Sound	19 42	400 00	.....	129 56	548 98	287 37	261 61	120	2,181	2,140	.....	1,325 00	.....
90	Pembroke	217 09	705 00	.....	212 84	1,134 93	998 31	136 62	795	3,139	10,175	31	1,711 62	21 50
91	Penetanguishene	104 16	450 00	.....	72 22	626 38	626 38	.....	261	4,366	5,298	12	3,357 75	37 72
92	Picton	215 56	747 00	4 50	135 69	1,102 75	1,052 90	49 85	897	3,900	22,221	53	2,771 87	.....
93	Port Carling	27 44	107 67	16 80	4 87	156 78	130 69	26 09	139	1,592	1,251	14	725 00	10 00
94	Port Colborne	50 91	100 00	.....	46 69	197 40	165 27	32 13	275	2,175	4,875	.....	1,463 89	.....
95	Port Rowan	67 51	.....	.....	51 97	119 48	115 75	3 73	300	2,126	1,745	.....	1,555 00	358 33
96	Prescott	127 16	250 00	.....	81 16	458 32	452 65	5 67	579	5,644	8,507	28	5,450 00	25 00
97	Preston	129 30	400 00	.....	96 77	626 07	570 52	55 55	600	6,820	7,575	27	6,865 00	.....
98	Renfrew	20 46	300 00	2 00	73 87	396 33	203 86	92 47	276	3,593	7,184	.....	3,584 07	77 43
99	Richmond Hill	47 88	100 00	2 50	62 66	213 04	180 32	32 72	125	3,376	2,690	18	1,615 00	.....
100	Ridgeway	38 46	25 00	.....	103 32	166 78	166 78	.....	120	1,624	2,697	.....	1,231 79	.....
101	Sarnia	250 00	2,062 22	.....	5,476 09	7,788 31	5,319 11	2,469 20	1,734	5,939	16,846	69	28,000 02	1,916 02
102	Seaforth	94 13	423 61	6 75	68 60	593 09	585 49	7 60	526	5,013	11,710	17	4,107 60	500 00
103	Shelburne	75 14	200 00	.....	36 59	311 73	249 99	61 74	154	2,639	2,736	21	2,075 00	.....
104	Simcoe	250 00	547 48	.....	526 49	1,323 97	1,028 63	295 34	597	6,305	12,280	54	10,295 34	.....
105	Smith's Falls	191 69	1,100 00	.....	91 32	1,383 01	1,371 54	11 47	1,078	4,735	16,402	45	18,300 00	.....
106	Stayner	31 18	70 00	6 15	6 21	113 54	113 54	.....	274	1,880	3,992	.....	1,320 11	.....

107	Stirling	17 65	122 00	22 70	126 21	288 56	247 47	41 09	250	790	2,419	.....	282 96	.....		
108	Stouffville	75 49	170 00	7 25	99 45	352 19	317 40	34 79	395	4,441	7,385	32	4,540 00	.....		
109	Stratford	238 47	1,500 00	10 00	703 94	2,452 41	2,169 19	283 22	1,600	7,872	38,663	45	20,653 00	.....		
110	Streetsville	53 91	160 00	.....	86 17	300 08	164 01	136 07	400	2,533	4,257	18	2 000 00	250 00		
111	St. Catharines	250 00	2,500 00	.....	789 50	3,539 50	3,063 43	476 07	3,544	10,125	31,663	69	39,900 00	.....		
112	St. Mary's	116 28	700 00	.....	162 60	978 88	882 63	96 25	496	6,006	16,575	33	3,050 00	.....		
113	St. Thomas	209 98	2,000 00	97 45	589 38	2,896 81	2,546 82	349 99	3,598	9,898	31,802	57	33,697 61	.....		
114	Tara	32 56	115 00	17 50	43 72	208 78	182 57	26 21	106	1,708	2,260	11	1,900 00	.....		
115	Thessalon	34 16	50 00	4 23	1 13	89 52	89 15	37	138	2,162	1,952	22	1,635 32	.....		
116	Thornhill	1 00	30 00	.....	21 50	52 50	51 91	59	150	896	755	.....	616 87	.....		
117	Thornloe (New Liskeard P.O.)	53 68	200 00	.....	26 69	280 37	279 62	75	143	1,136	2,375	.....	721 91	.....		
118	Thorold	65 09	325 00	.....	21 43	411 52	404 11	7 41	400	5,491	9,363	20	5,685 00	.....		
119	Toronto " Northern	250 00	40,365 67	.....	2,399 82	43,015 49	43,010 41	5 08	42,162	144,809	258,894	799	339,505 74	48,635 02		
	Toronto " Branch	.....	1,557 33	.....	49 95	1,607 28	1,607 28	.....	8,605	6,575	35,508	75	18,593 93	.....		
120	Tottenham	.....	.....	.....	21 23	21 23	21 23	.....	99	2,283	1,272	.....	1,260 00	.....		
121	Trenton	.....	250 00	.....	50 80	300 80	300 80	.....	*	2,293	8,000	58	2,379 06	*		
122	Uxbridge	76 65	250 00	23 50	212 75	562 90	562 90	.....	875	6,757	10,425	30	9,900 00	37 75		
123	Walkerville	228 87	2,657 69	23 00	84 71	2,894 27	2,429 54	464 73	540	1,636	12,782	22	3,434 17	.....		
124	Wallaceburg	141 60	409 10	.....	437 61	988 31	872 57	115 74	370	3,193	8,325	29	2,432 40	.....		
125	Waterford	27 82	100 00	9 05	11 25	148 12	133 31	14 81	103	1,482	3,190	.....	950 00	.....		
126	Waterloo	172 96	929 66	2 00	508 21	1,612 83	1,612 83	.....	557	8,406	11,900	48	8,239 02	317 10		
127	Watford	68 71	175 00	.....	151 58	395 29	394 23	1 06	211	3,030	4,626	27	1,600 00	.....		
128	Westford	25 85	15 00	.....	12 76	53 61	52 27	1 34	103	1,629	503	.....	1,260 63	.....		
129	Wiarton	13 55	200 00	.....	94 00	307 55	270 02	37 53	350	3,497	4,068	18	2,992 93	.....		
130	Windsor	250 00	3,650 00	.....	609 62	4,509 62	4,227 82	281 80	1,648	14,117	46,700	73	45,719 62	.....		
131	Wingham	121 50	325 00	65 63	51 32	563 45	556 92	6 53	419	4,272	9,928	40	2,740 00	.....		
132	Woodstock	250 00	1,200 00	.....	256 86	1,706 86	1,682 98	23 88	1,278	7,139	37,828	36	4,200 00	75 00		
133	Wroxeter	42 78	115 00	.....	24 96	182 74	178 53	4 21	182	4,634	3,159	.....	4,539 81	.....		
	Totals	11,958 84	135,042 66	769 18	31,686 98	179,457 66	166,188 34	13,269 32	155,086	727,368	1,882,986	4,316	1,392,200 41	136,156 62		

*Not reported.

Ontario Society of Artists.

The annual meeting was held Feb. 27th, when the following officers were elected: —

President.—F. M. Bell-Smith.

Vice-President and Treasurer.—E. Wylie Greer.

Secretary.—R. F. Gagen.

Auditors.—J. A. Smith and C. E. Nourse.

Executive Council.—F. S. Challener, W. Cruickshank, C. W. Jefferys, F. McG. Knowles, E. Morris, G. A. Reid, A. C. Williamson.

Selection of pictures for the Provincial Art Gallery—Government grant. The ballot for the choice of two works at $100.00 each resulted in the selection of No. 27, "Gathering Wild Hay," by W. Cruickshank, R.C.A., and No. 87, "Ptarmigan and Arctic Fox," by T. Mower Martin, R.C.A.

The following pictures were chosen by the Committee of the Guild of Civic Act for the $800.00 grant: —

"Men May Come and Men May Go".....W. Cutts.
"A Quiet Old Road" .....F. S. Challener, R.C.A.
"The Vale of Tintern" .....G. E. Spurr.
"In the Laurentians" .....J. W. Beatty.
"Solitude on the Moors" .....W. E. Atkinson.

Annual Exhibition.—The 34th Annual Exhibition was formally opened by His Honour the Lieutenant-Governor, on the 23rd of February, and closed on the 24th of March. The crowd on the opening night was excessive and the attendance during the following weeks fairly good. There were in all 150 works shown, of which thirty members contributed 92 and 35 non-members sent the other 58. Classified, there were 145 paintings in oil and water color and pastel, 3 pieces of sculpture and 2 designs.

Exhibition at Owen Sound.—On March 6th to 9th an exhibition was held at Owen Sound under the auspices of the King's Daughters, to which were sent 111 pictures, 29 members contributing. Six pictures were sold.

Exhibition of works by Glasgow Painters.—An exhibition of pictures by the Glasgow painters was held under the joint auspices of the Toronto Art Museum and this Society from April 20th to May 15th. Some 92 works were shown, and the collection proved very interesting and instructive.

Normal School Gallery.—The Provincial Art Gallery was re-hung on June 1st and considerable improvement made in the arrangement.

Hamilton Art Loan.—The Canadian Club of Hamilton, by arrangement with the Society, held an Art Loan Exhibition during the months of July, August and September, to which members contributed nearly 100 works.

Canadian National Exhibition.—Once more the Toronto Industrial Exhibition Association arranged with this Society to manage the Art Section. The Exhibition as a whole was very fine and the Canadian pictures were of a high standard throughout. The committee, though laboring under extreme difficulties, succeeded in making a very pleasing and effective arrangement. Among the works of European Artists loaned for this Exhibition were some of exceptional value, and high merit, but they nearly all belonged to an old school, and were therefore not of such value, from an educational point of view as would have been pictures by some of the best modern painters.

Exhibition at Ottawa.—A collection of over 100 pictures by members was made by the President, who went to Ottawa and arranged them. This was done under an agreement with the Central Canada Exhibition Association in September.

Huron Institute.

During the year nine meetings were held, three open or regular and six executive. Mr. Frank Yeigh delivered an illustrated address, subject, 20th Century Canada. Mr. E. Stewart gave a descriptive talk on a trip to the great northland. Miss E. F. Redmond furnished an interesting paper relating to Charles Garnier, the martyr of Simcoe. Dr. J. H. Irwin and Mr. F. Telfer spoke upon Civic Improvement.

The notable event in the history of the Institute was the visit of the Ontario Historical Society on Thursday and Friday, July 19th and 20th. Two hundred citizens joined the visitors in a trip to Christian Island where the historians visted the ruins of Fort St. Marie II, which was occupied by the Hurons in the closing days of their conflict with the Iroquois.

Mr. John Bernie, K.C., delivered an eloquent address. Numerous relics and specimens have been added to the museum collection. During the year historical researches were conducted by Messrs. Bruce, Freer, Telfer, Morris and Williams. Several sites of Indian villages in the Petty River Valley were examined, notably that on the farm of Mr. Alexander Currie, lot 24, con. 12, Township of Nottawasaga, which is supposed to have been the location of the Petum village of St. Mathias. A visit was made to what is believed to be Ekarennondi or the Standing Rock of the Petuns.

Several members made a trip to the Nottawasaga River for the purpose of finding a cannon from the wrecked British warship Nancy, which lies in the river. The expedition was not successful, but the site of Fort Nottawasaga was however examined.

The second vice-president, Mr. John Lawrence, reports the discovery of a new Indian village site on the farm of Mr. Thomas Martin, near Craigleith, which he believes to be one of the villages which composed the mission of St. Jean, of which Fathers Chabannel and Garnier were the resident missionaries.

The museum has been enriched by a valuable collection of specimens presented by Mrs. F. E. Webster, of Creemore.

Mr. J. S. Duff, M.P.P., has been untiring in his efforts to assist the Institute.

Hamilton Scientific Association.

During the session twelve meetings of the General Association and twenty-five meetings of sections were held, at which meetings the following papers were read and discussed:—

Inaugural address. President R. J. Hill.
The Ice Age and the History of the Great Lakes. W. A. Jennings, B.A.
Through South Africa to Victoria Falls. Prof. A. P. Coleman, M.A.
Electrolysis. E. G. Barrow, C.E.
The Cobalt Mining District. Prof. W. A. Parks, M.A.
Malleable Iron. F. B. Chadsey, B.A., B.Sc.
The Tripartate Nature of Man. Rev. S. Lyle, D.D.
Notes on Plant Distribution. A. Alexander, F.Sc.S.
Tuberculosis. J. Roberts, M.D.
The English Bible. H. B. Witton.
Natural History Notes. William Yates.
Astronomy, Its Uses. Rev. Dr. Marsh.
Reading the Sky from Northern Ontario. G. Parry Jenkins, F.R.A.S.
The Stars. Prof. N. F. Dupuis, M.A.
Exploring the Solar Atmosphere. Prof. C. A. Chant, M.A., Ph.D.

Notes on Gyroscope. E. H. Darling.
Measuring Star Distances. G. Parry Jenkins, F.R.A.S.
Geological Notes. Col. C. C. Grant.
Geological Notes (continued). Col. C. C. Grant.

Dr. Fletcher of Ottawa was appointed to represent the Association at the recent meeting of the Canadian Royal Society.

The members of the Geological section have collected a large number of fossils, many of which have been sent abroad to different museums. Prof. W. D. Lang, of the British Museum, acknowledges the receipt of 129 specimens of fossils, among which were specimens of Cladopora and Lechenalia, new to science. Prof. J. F. Whiteaves, acting director of the Geological survey of Canada, and Prof. Clark, State Geologist of the State of New York, also acknowledges the receipt of fossils. Information has been received from Ottawa that the collection of bryozoons from Hamilton has been forwarded to Dr. Brostter of the Smithsonian Institute, a scientist who has made a study of these obscure Silurian remains.

The following officers were elected for the session of 1907-1908:—

President.—R. J. Hill.
First Vice-President.—J. M. Williams.
Second Vice-President.—William Acheson.
Corresponding Secretary.—S. A. Morgan, B.A., D.Paed.
Recording Secretary.—J. F. Ballard.
Treasurer.—P. L. Scriven.
Curator.—J. M. Williams.
Council.—Robert Campbell, A. H. Baker, James Gadsby, C. J. Milne, Lyman Lee, B.A.

During the year 23 new members have been received. The membership now exceeds the 300 mark.

Excursions.—The educational work of the club is carried on by means of excursions, soirees, and the publication of the Ottawa Naturalist. The excursions are local in character and are attended by specialists in botany, geology, zoology, ornithology and other branches who instruct the co-workers and aid in the field work by delivering addresses at the close of the afternoon.

The following programme for the excursions represents the years work:—

April 28th, Blueberry Point, Aylmer.
May 5th, Rockliffe Park.
May 12th, Beaver Meadows, Hull.
May 19, Cement Works, Hull.
May 26, Chelsea, Que.
June 2nd, Experimental Farm.
June 9th, Rideau Park.
June 16th, Galetta.
June 23rd, Hemlock Lake.
Sept. 18th, Chelsea.
Feb. 9th, Snowshoe Tramp, Beaver Meadows.
Feb. 23rd, Snowshoe Tramp, Rockliffe.

The Snowshoe Tramps have shown that valuable field work can be carried on in the Winter. The botanists observed at Beaver Meadow the distribution of deciduous and evergreen trees, the occurence of species easily passed by unnoticed in Summer, the branching of deciduous trees, the persistent fruit of the Climbing Butternut, the characteristic Winter appearance of the Juniper, various methods of bud protection and many other interesting features of Winter vegetation.

Winter Lectures. The Club prepared an excellent series of Winter lectures. Large audiences attended. The opening soiree was held December 6th, when the President, Mr. Wilson, gave an address on the benefits and pleasures to be derived from a participation in the work of the Club. Dr. Fletcher presented a paper on "An Entomological Excursion to the Selkirk Mountains," illustrated by lantern slides. The following programme was carried out at different dates:—

The Physics of the Atmosphere. A. A. Campbell.
The Relation of Climate to Health. Dr. P. H. Bryce.
Physical Conditions of Life in Deep Seas. Dr. R. A. Daly.
Description of College at St. Anne de Belleville. Prof. Lochead.
Chapter from the Manuscript of Mr. Earnest Thompson Seton's new book, "The Mammals of Manitoba." Read by Dr. Fletcher.
Methods of Field Work pursued by the Club. Dr. Ami.
Animal Minds and Nerves. Earnest Thompson Seton.

The Ottawa Naturalist, vol. XX, was published in monthly parts, consisting in all of 253 pages and two plates. The series of articles on Nature Study, edited by Dr. James Fletcher, was continued, bringing the number of papers published in the past four years up to 42.

In volume 20 the following papers on Nature Study appear:—
Definite Problems in Nature Study. Dr. S. B. Sinclair.
A Cement Sidewalk. S. B. McCready, B.A.
The Galt Park Wild Flower Garden. R. S. Hamilton.
Foundations of Chemistry as seen in Nature Study. Jno. Brittain.
The Ceeropia Emperor Moth. Arthur Gibson.
School Exhibits of Pressed Plants. Dr. Jas. Fletcher.
Agencies for the promotion of Nature Study. Prof. Lochead.
Manual Training, the Mechanical Hobby. Dr. M. G. McElhinney.
Manual Training, the Machinist's Art. Dr. McElhinney.
Relation of Sparrows to Agriculture. L. H. Newman.

Branch Reports.—Several of the branches hold house to house meetings.

The council added to the existing sections by instituting a Department of Meteorology under the leadership of Dr. Otto Klotz.

The Summer School of Science, under the direction of Mr. J. H. Putman, was assisted by various members of the Club.

Scientific Society of the University of Ottawa.

During the year following papers were read and addresses delivered:—
Animal Instinct. Rev. J. A. Lajeunesse.
The Weather. Hollis Burns.
Our Forests. Austin Stanton.
The Transmission of Sound. M. Doyle.
Properties of Oxygen. Rev. L. Binet, M.A.
Joan of Arc. Dr. Walters.
Progress of Science during the past two years. J. McNeill.

On May 29th a Geological Excursion to McKay's Lake was made under the direction of the Rev. J. A. Lajeunesse. Special study was given to the shells found in that locality.

The following officers were elected for the year:—
President, John Marshall.
Vice-Pres., Edwin McCarthy.
Secretary, John R. Corkery.

Treasurer, H. St. Jacques.
Councillors:—A. B. Cote, A. Comllard, M. O'Gara, R. Morrin.
Director:—Rev. J. A. Lajeunesse.

The Ottawa Literary and Scientific Society.

The report of the librarian shows that 145 volumes were added to the library during the year.

Steps are being taken to publish another volume of the transactions of the Society's work.

The course of lectures arranged for the Winter was one of exceptional interest, and the attendance was in excess of former years. Three illustrated lectures were delivered in the lecture hall of the Normal School, the other lectures being given in the Carnegie library. The programme of the course was as follows:—

The Causes that led to the War of 1812. Dr. Benjamine Sulte, F.R.S.C.
The Southern Trail of British Columbia, J. Macoun.
Mexico Illustrated. Dr. R. A. Daly.
The Arctic Watershed and its Resources (illustrated). Elihu Stewart.
Machiavelli: A Study in Ethics, K. S. Ewart, K.C.
The Archives of Canada. Dr. A. Doughty, F.R.S.C.
The Romance of the Fur Trade. L. J. Burpee.
The True History of the Encyclopædia Britannica. Prof. E. E. Prince, F.R.S.C.
Earthquakes, illustrated. Dr. Otto Klotz.

L'Institut Canadien Francais D'Ottawa.

The following is the programme of the Conferences held during the year:—

Canadian Poetry. Henri Desjardins.
Mission to Rhodesia for the foundation of the Pasteur Institute, Remi Tremblay.
Intensity of local life in France; Popular literature in Britany. Anatole Le Braz.
Brouille. Rudolphe Girard.
The Gentleman. Rev. Father Lalonde.
The Canadian West. I. E. Cyr.
The Institute Reminiscences. Senator Porrier.

At the close of the academic year a rendering of the comedy by Mr. Rodolphe Girard, entitled "The Finger of Woman," was an important feature and a decided success.

The Institute comprises nearly two hundred elected members. It is the intention to encourage literary efforts in the schools by offering prizes.

The following gentleman are members of the Executive Council of the Institute for 1907:—

Rodolphe Girard, President; T. L. Richard, Vice-President; Moise Lalonde, Secretary; I. E. Marion, Treasurer; and Messrs. F. R. E. Campeau, A. M. Lafontaine, H. Beaulieu.

Canadian Institute.

During the year 22 meetings have been held at which the following papers have been read:—

Atmospheric Circulation. The President.

The Geological Congress in Mexico. Prof. A. P. Coleman.

Specimens from Biology Museum Described. Prof. A. R. Wright.

Early Records of the Mineral Wealth of Canada. Prof. T. L. Walker.

The Raising of the S. S. Bavarian. R. O. King.

Combustion. Prof. W. R. Lang.

The Exploration of the Atmosphere over Land and Sea. Dr. A. L. Rotch.

Some things that People ought to Know about Plants and Insects. Dr. J. Fletcher.

The Marine Biological Laboratory on Georgian Bay. Dr. B. A. Bensley.

Interesting Problems in Canadian Geology. Dr. H. A. Ami.

Infections due to Yeast—like Fungi. Dr. J. J. Mackenzie.

The Ancestry of the Cone-bearing Plants. R. B. Thompson.

The Physical Basis of a new theory of Heredity. Dr. A. B. Macallum.

Waves in the Ether, A general survey. Prof. C. A. Chant.

Architectural Acoustics. G. A. Anderson.

Some notes on the Electric Properties of Husler's Magnetic Alloys. Prof. J. C. McLennan.

Agricultural Ideals. C. C. James.

The Anatomy of the Anthropoid Apes. Dr. A. Primrose.

Do we need a College of Forestry? T. Southworth.

Ignored Distinctions in Economics. W. A. Douglas.

Recent Investigations of Complex Mental Operations. Prof. A. H. Abbott.

Biological Section of Canadian Institute.

During the year six basket outings were held as follows:—

May 19th, York Mills.

June 16th, Lambton.

July 21st, Humber, by boat.

Aug. 4th, Scarborough Heights.

Aug. 13th, Hemlock Grove Farm.

Sept. 13th, Lorne Park.

Other regular outings were held as follows: -

June 2nd, Eglington.

July 7th, High Park.

On September 1st a special study was made of the Natural History exhibit at Toronto Exhibition.

During the session (Winter Season) eleven general meetings were held, at which meetings the following papers and addresses were given:—

President's address, with a talk on birds and exhibition of specimens. J. Maughan, Esq.

Rambles in the North West. Mr. Townsend.

Visit to Biological Museum of Toronto University. Address by Dr. Ramsay Wright.

Papers on Mosses with exhibition of specimens from the Sullivan collection, with lantern illustrations by Prof. J. H. Faull.

Foreign Birds with exhibition of specimens and lantern illustrations by Mr. J. Maughan, Jr.

Microscopic Study of Mosses.

Practical collecting of Lepidoptera, illustrated by examples in setting and exhibition of specimens by E. V. Rippon.

Ancestry of Insects by Dr. Walker.

The following officers were elected for 1907-8:—

President—John Maughan.

1st Vice-Pres.—S. Dillon Mills.

2nd Vice-Pres.—Dr. A. R. Abbott.

3rd Vice-Pres.—John H. Young.

Curator—E. V. Rippon.

Secretary—S. Farmer.

Council—Messrs. Laughlen, Williams, Blizzard.

The Royal Astronomical Society of Canada.

The transactions of the Society during the past year include the following:—

Eighteen regular meetings were held.

The following papers were submitted:—

Some differences in Ancient and Modern Science. Mrs. S. D. Keran.

Time service of the Dominion Observatory. R. M. Stewart.

Terrestial Magnetism. Andrew Elvins.

Astronomical and Geological Periods. Andrew Elvins.

The relation of Magnetic Disturbances to the Auroræ observed in 1905. R. F. Stupart.

Physical Theories of the Universe. Prof. De Lury.

Age of the Earth. J. R. Collins.

Account of the ordinary views held as to the Earth's Evolution. F. L. Blake.

Stonyhurst College Observatory. Rev. Father Kavanagh.

Some Problems as to the Earth's interior and some Novel views regarding Transmutation of the Elements. Prof. Kirschmann.

Double Stars (two papers). W. E. Jackson and A. F. Miller.

Astronomy and the Bible. J. E. Maybee.

Work done on the Planet Mars. L. H. Graham.

The Astronomy of Shakespeare. John A. Paterson.

Determining the Alaskan Boundary. A. F. McDiarmid.

In addition to the regular papers some valuable reports were recorded and many helpful discussions took place.

During March and April a course of six elementary lectures on the "Physical Constitutions of the Heavenly Bodies" was given by the President.

It was decided to issue, first, a Canadian Astronomical Handbook, containing astronomical predictions and other information; second, a bi-monthly periodical, which would contain papers presented to the Society, minutes of meetings, discussions, reviews of scientific articles and new books and other matters of interest.

Society of Chemical Industry.

During the year, 1906-7, thirty new members have been added to the roll.

The following meetings were held:—

1. "Excise Free Alcohol." W. P. Cohoe.
2. "Deleterious Effect of Acid Pickle on Steel Rods." W. R. Lang and H. A. Baker.
3. Chairman's Inaugural Address. "Chemical Schools and Chemical Industry."
4. "Wood Alcohol." A. G. Pencer.
5. "Treatment of Water for Boiler and Manufacturing Purposes." C. R. Hazen, B. Sc.
6. "The Function of Caustic Soda," "Processes in the Production of Cellulose from Woods." J. A. DeCew, B.A.Sc.
7. "Canadian Power Development at Niagara Falls." Prof. T. R. Rosenburgh.
8. Annual Meeting. "Recent Progress in Electric Furnaces." Saul Dushman.
9. "Industrial Uses of Calcium Chloride." Chas. H. Bowman.
10. "The Determination of Boric Acid" and "Boratis in Foodstuffs and Commercial Products." W. R. Lang and R. T. Manning.
11. "Recovery of Glycerine from Waste Liquors." A. P. Taylor.

Wellington Field Naturalists' Club.

From October 15th, 1906, to May, 1907, the Club held two meetings each month in the Agricultural College; several special meetings were also held. At each meeting one or more addresses were delivered. During the year the third number of the Ontario Natural Science Bulletin was published.

The following is a partial list of the addresses given and the papers read:—

Bats. B. Barlow.
Dragon Flies. T. J. Moore.
The Flora of Northern Ontario. T. D. Jarvis.
The Growth of Seedlings. S. B. McCready.
Protective Colourization of Animals. L. Cæsar.
Ambrosia Beetles. Dr. Bethune.
Parasitism in Animal Life. G. E. Sanders.
Salamanders. L. Taylor.
Habits of Flying Squirrels. H. Bond.
Fish of River Speed at Guelph. L. Beattie.
Habits of Spiders. B. Barlow.
Willow Galls. J. Treherne.
Symbiosis in Plants. J. W. Eastham.
The Grossbeaks at Guelph. J. E. Howitt.
The Porcupine in Northern Ontario. H. Graham.
Moles of Wellington County. L. Goldie.
Mosquitoes. T. D. Jarvis.
Frogs of Wellington County. T. J. Moore.
Red Squirrels. A. J. Painter.

St. Patrick's Literary and Scientific Association.

The following lectures were delivered during the season 1906-7:—
The Irish Party, D'Arcy Scott.
Our Heritage, Dr. A. Freeland.
The Gaelic Revival, T. D'Arcy McGee.
Tuberculosis, Dr. J. R. O'Brien.
Trips to Ireland, Chas. Murphy.
Literature, Dr. J. K. Foran.
The Brehan Laws, E. P. Gleeson.

Ontario Historical Society.

The annual meeting of the Society was held at Collingwood. Miss Merrill read a paper on what was known as the Washburn Treasure, a somewhat singular episode in local history. A paper by Mr. G. H. Hale, of Orillia, was read by Mr. D. Williams, of Collingwood. At the evening session an address of welcome was delivered by Alderman Watson. Major Bruce gave an address of welcome to the parent Society. Mr. C. C. James, Deputy Minister of Agriculture, read his essay on the Downfall of the Huron Nation. Col. Cruickshank, of Niagara, was presented with an illuminated address.

An excursion was made through the Christian Islands where the members examined the Indian Reserve.

The following officers were appointed:—
President.—Col. Rogers.
First Vice-President.—Barlow Cumberland.
Second Vice-President.—David Boyle.
Treasurer.—Frank Yeigh.
Council.—Messrs. Col. Cruickshank, Mrs. E. J. Thompson, David Williams, Rev. Chancellor Burwash and Alexander Fraser.

Three council meetings were held during the year. Arrangements have been made for copying and printing the church records at Ernestown, from 1787 to 1813.

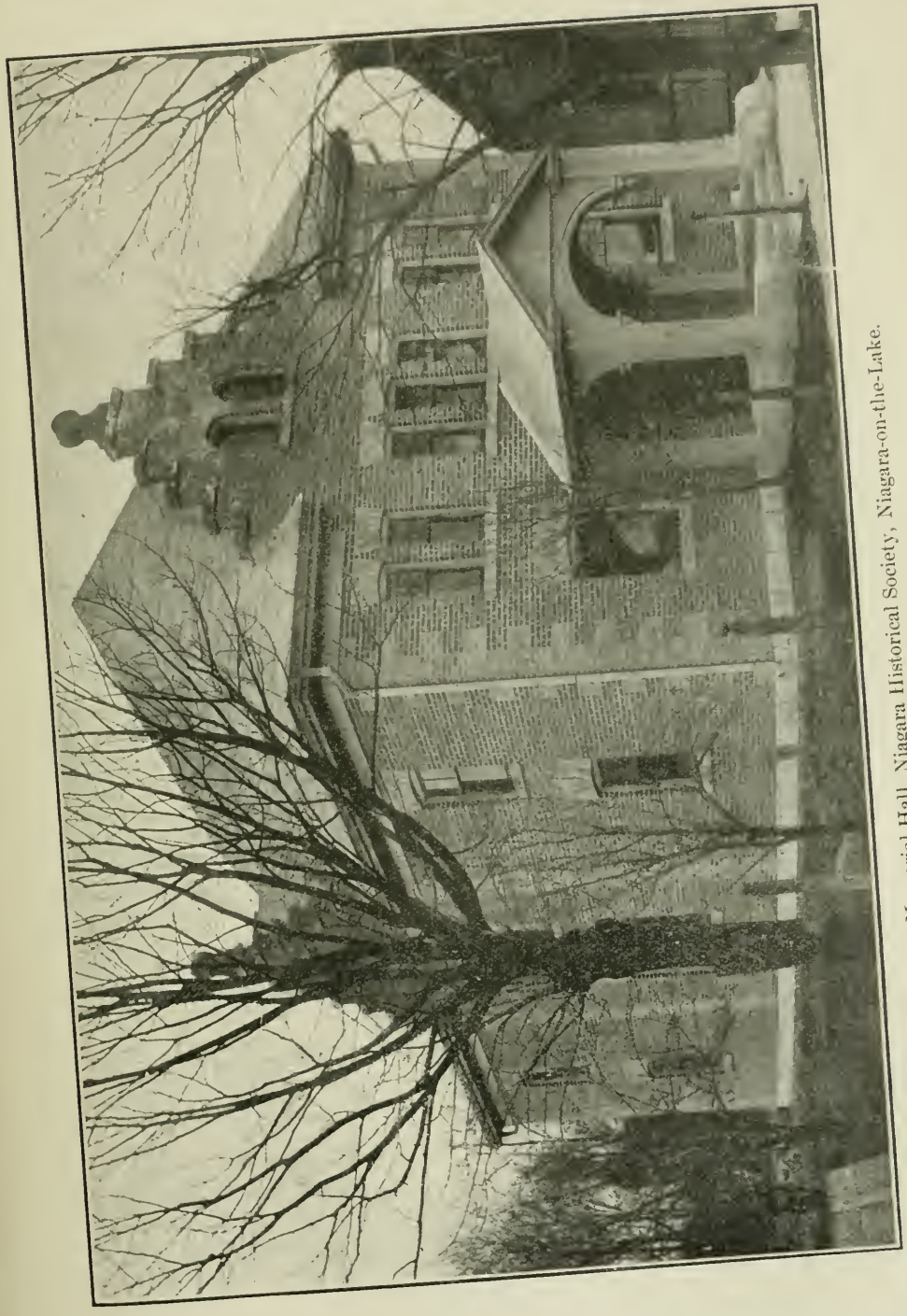
The Woman's Canadian Historical Society, Toronto

The notable work accomplished by the Society during 1907, has been the publication of a diary of the Rev. Henry Scadding, 1837-1838; an epitome of the life and letters of the Right Honourable Charles, Lord Sydenham, G.C.B., compiled by Mrs. Gordon Mackenzie (his niece); also extracts from an original MS. Memoir of Captain Freer, A.D.C. to H. R. H. the Duke of Kent, and Military Secretary during the war of 1812 (now in the possession of Mrs. Gordon Mackenzie).

The diary of the Rev. Henry Scadding gives many interesteing descriptions of events and people connected with the rebellion. It is dated from Montreal and Quebec and should be read with interest as a vivid chapter in the early history of Canada.

The epitome of the life and letters of Lord Sydenham contains a brief sketch of a personal character, also comments relative to the conditions existing at the time of his appointment as Governor-General of British North America and Captain-General and Governor-in-Chief of the Provinces of Upper and Lower Canada, Nova Scotia, New Brunswick, and Prince Edward. The consummation of the union of Upper and Lower Canada forms a chapter vital with interest to all Canadians.

The memoir of Captain Freer refers to the period from 1799 to 1815.



Memorial Hall, Niagara Historical Society, Niagara-on-the-Lake.

Memorial Hall of Niagara Historical Society.

(Contributed by Miss Janet Carnochan.)

The Niagara Historical Society was formed in December, 1895. A few lines in the local paper asked those interested in historical matters to meet together and from this meeting of little more than a dozen has originated the work accomplished during the last twelve years, which may be briefly summed up thus:—

Fifteen pamphlets have been printed, eight markers placed in historical spots, over three thousand articles collected and a building erected, costing nearly $5,000.00, to contain them, and besides this, it is hoped an interest has been aroused in the history of our country and patriotic feelings intensified. There are now nearly 150 members, many of these in the different provinces of our Dominion, or in the United States.

A room in the third story of the Court House was granted for our meetings, and it was determined to print some of the papers read before the members. The Society was fortunate in obtaining an address from Col. Cruickshank, the Historian of the Niagara Peninsula and of the war of 1812. With an empty room, an empty treasury, and a great deal of cold water copiously and gratuitously poured upon us we determined to print at our own expense this address, "The Battle of Fort George," and to endeavor to make an historical collection. A request was made for assistance from the Provincial Government for printing purposes, which was granted, and besides the fifteen pamphlets, twelve annual reports and various other documents and circulars have been issued.

On 17th September, 1906, a Loan Exhibit was held which attracted much attention and gradually articles were contributed. Discarded cases had been given from the Provincial Museum, old picture frames from the garrets of the town, the members gave a chair each for the monthly meetings. It had been said it was useless to try to make a collection, everything had been given away or destroyed, or if anything valuable still existed it would not be given, but the falsity of these prognostications was soon proved, for in time the walls were covered, the cases filled, and the idea that a building must be provided took shape, but was by many looked on as chimerical.

It has been suggested by Canon Bull of the Lundy's Lane Historical Society that there should be a cairn here erected to mark the landing of the United Empire Loyalists. A circular was sent out asking assistance with the suggestion that instead of a cairn or tower the memorial take the form of a building to contain the collection constantly becoming more valuable, but this circular of 1898 met with little response. On 17th September, 1903, a public meeting was called, a few Toronto friends interested in the plan were invited to attend, among them C. C. James, F.R.S.C., and David Boyle, Supt. of the Archæological Museum. It had been intended to first solicit help from the Government, but the advice was given to try first what could be done by ourselves. Accordingly circulars were printed, five hundred in number, a personal canvass was made of our members and townspeople, personal letters were sent to old Niagarians and others interested and $1,000.00 was thus collected. A deputation then visited the Ontario Government in April, 1904, when $500.00 was granted in the supplementary estimates. The next spring a visit was paid to the Dominion Government, in spite of friends saying this would be useless, as it was a purely Provincial matter, but our list of members in the Dominion, and contributions to the contents of our room proved that we were not merely local in our aims. To our great joy when the supplementary list appeared it was found that $1,000.00 had been

granted, and in the spring of 1906 the present Provincial Government kindly contributed $500.00 additional. An old Niagara boy, Hugh J. Chisholm, of New York, gladdened our hearts with a cheque for $500.00. The town council then contributed $200.00, and M. F. Rittenhouse, of Chicago, $100.00. The remaining sum of $2,000.00 has been given in sums from one dollar to fifty. A site was given by the President, plans and specifications decided on, and a tender accepted for $4,100.00. Besides this, the cases furnishing, extras, have brought the cost up to $4,850.00, and as the subscriptions amounted to $4,500.00 there remains a deficit of $350.00 which we have faith to believe will yet be made up.

The building faces an historic plain, Butler's Barracks, and the military camp ground. It is of solid red brick with buff brick trimmings, 60x30, with a portico 10x10; a gallery, supported by ornamental pillars, runs round the two sides and one end so that all the wall space can be used. The floor is of hard wood maple, the railing of the gallery Georgia pine, with mahagony posts, the cases are of oak, chestnut, and walnut. The building is well lighted, and handsome in appearance. This is the first building erected in the Province for purely historical purposes. It is true there are other historical buildings, but these have been either given or rooms allotted in Carnegie Libraries. With regard to the name it was proposed at first to call the Hall Memorial of U. E. Loyalists, another suggestion Memorial of the war of 1812, but the President wished a more comprehensive title than either of those, that it should be simply Memorial Hall, and in memory of early settlers, military, etc., in short, of everything great and good, in the past in our history.

The eight historic sites marked are:—

1. The burial place of General Brock, 1812-1824.
2. The site of Navy Hall.
3. The site of the Military Hospital and Indian Council House.
4. The house built by Count de Puisaye, 1799.
5. Site of Gleaner Printing Office, 1817, and first Masonic Hall, 1792.
6. Site of Government House.
7. Court House built in 1847 for United Counties of Lincoln, Welland and Haldimand.
8. Spot where bodies of soldiers were found, killed 27th May, 1813, when Fort George was taken.

Our publications are:—

1. Battle of Fort George, by Col. Cruickshank.
2. Slave Rescue, 1838.
3. Blockade of Fort George.
4. Battle of Queenston Heights.
5. Historic Houses.
6. Niagara Library, 1800-1820. Early Schools.
7. Historic Churches, etc.
8. Family History, Kemp, Servos, Whitmore, Jarvis, Land.
9. Campaigns of 1812.
10. Inscriptions and Graves in Niagara Peninsula.
11. Reminiscences of Niagara.
12. Battle of Fort George, 2nd edition with additions.
13. St. Vincent de Paul Church and Canadian Heroine.
14. Letters of Mrs. Wm. D. Powell, 1807-1821.
15. Sir Isaac Brock and Count de Puisaye.

The next publication will be a report of the opening of Memorial Hall, 4th June, 1907, with an account of the Evolution of the Building, the list

of contributors, and the items of expenditure. Since the opening there have been recorded in the new visitor's book 1,200 names of many classes, school children, military, Guelph bowlers, Buffalo High School girls, Rittenhouse yacht party from Chicago, Students' Volunteer Movement, Literary and Historical Societies, summer visitors ,etc.

The collection may be thus classified:—

1. Military accoutrements.
2. Portraits of early settlers, etc.
3. Niagara printing, books, papers, pamphlets.
4. Rare books, miscellaneous papers.
5. Woman's work and wear.
6. Household articles.
7. China
8. Indian relics.
9. Original letters, documents, autographs.

The military collection is very full from the capture of Fort Niagara from the French, 1759, and the Revolutionary War, down to the Fenian Raid. A pewter platter which belonged to Col. Johnson, who was killed at the seige of the fort and buried in the chapel with General Prideaux. A military coat worn by Fort Major Campbell who was with Cornwallis at the surrender of Yorktown, 1781. Coat worn by Capt. McMicking at Queenston Heights, 1812. American sword given up at the capture of Fort Niagara by the British after the burning of Niagara 13th Dec., 1813. Pocket book of Capt. Martin McClelland, killed at the capture of Fort George by the Americans, 27th May, 1813. Key of Tower Magazine of Fort Mississauga, sent all the way from Wisconsin to us by post. A collection of buttons, which may be said to represent the military history of Niagara, as nearly all the regiments which fought or were stationed here are represented, British, United States, Canadian. Muster roll of a company of Butler's Rangers, signed Lt. Jacob Ball, 1782. In a space allotted to General Brock, near his cocked hat, are posters framed of arrangements for the funeral in 1824 and in 1853, views of the old monument, account of the Brock dinner in 1840. Among the flags, those of the 2nd and 4th Lincoln, the latter was made by the Misses Nelles in 1818, the banner of the Loyal Canadian Society of Grimsby made for the inauguration of Brock's monument in 1853.

One case has very interesting contents, being printing in Niagara from 1793. An Upper Canada Gazette or American Oracle, 1794. A pamphlet of 1799. Gleaner of 1817, books printed by the different proprietors of papers, Tiffany, Andrew Heron, Thos. Sewell, John Simpson, Wm. Kirby. A case beside this contains rare books and pamphlets, some of which could scarcely be duplicated. St. Ursula's Convent, bound in leather, the first novel published in Upper Canada, printed in Kingston, 1824. It has been stated that the Toronto Reference Library contains the only copy of this, purchased at a great price, but we are the happy possessors of another copy freely given, the first poem published in U. C., "A day at the Falls of Niagara," printed in York, 1825. The manuscript record book of the first library in U. C. (that of Niagara), 1800-1820. On the walls, framed, the proclamation of Wm. Lyon McKenzie from Navy Island and that of the apprehension of Morreau, hanged at Niagara in 1838. Hat worn by Ralfe Clench at the opening of Parliament at Niagara 17th Sept., 1792.

There are three cases of woman's wear and woman's work, one of these contributed by the Ball family, all these very interesting to the ladies. An old mantel and fire-place recalls "The hanging of the Crane." Household articles

the use of which is now almost forgotten, a case of old china, the envy of collectors, a beautiful Colonial mantel (and thereby hangs a tale), and indeed many of the articles have an interesting story.

One case contains miscellaneous articles, the oldest being flints used by the ancient Britons before the arrival of the Saxons, and a Roman battle axe found in an Ayrshire bog. In the gallery are wheels, reels, heckles, carders used before machinery had driven out individual workers. A case showing what beautiful sewing was done before the arrival of the sewing machine.

The revolving case contains hundreds of photos of early settlers. U. E. L's, the mayors, doctors, judges, clergymen, members of Parliament of the town. A large scrap book is filled with original letters, documents, autographs which have enabled us to answer many letters of inquiry.

Smaller scrap books contain family and town records. Among the pictures are several fine water colors by Hoppner Meyer, in 1832. The collection of bound newspapers is valuable, one contains examples of fourteen newspapers published in the town (there have been twenty). Two book cases contain publications by exchange with United States and Canadian Historical Societies. Several frames are filled with commissions granted to early military men. There are a few articles of furniture, as a beautiful little mahogany looking glass with drawers brought from the Mohawk Valley in 1784. The student might here spend days examining documents which throw much light on forgotten points of our history, and it is believed that more and more additions to the collection will be contributed, making more valuable still the contents of Memorial Hall.

Officers of the Society.

President.—Miss Carnochan.
Vice-President.—Rev. J. C. Garrett.
Secretary.—Alfred Ball.
Treasurer.—Mrs. S. D. Manning.
Curator and Editor.—Miss Carnochan.
Committee.—Mrs. T. F. Best, F. J. Rowland, W. R. McClelland, Rev. J. P. Bench, W. J. Wright, M.A.
Motto.—Ducit amor patriae.

Essex Historical Society.

During the year one public meeting was held, at which the following papers were read:—

The Battle of Windsor. Francis Cleary. (Part of the paper was furnished by John Sullivan, an eye-witness of the battle).

The Battle of Windsor. John Harmon. (Mr. Harmon is an ex-Mayor of Detroit and was one of the invaders).

The Society placed two bronze tablets during the year, one on the Fire Hall, the location of the first barracks burned by the invaders in 1838; the other on the store of J. F. Smyth & Co., corner of Sandwich and Church Sts. This tablet marks the site of the battle of Windsor.

London and Middlesex Historical Society.

During the year the Society voted $100 towards assisting in the erection of a monument in Victoria Park, in memory of the men who fell in South Africa while maintaining the unity of the Empire. The task of erecting

the monument has been undertaken by the Daughters of the Empire. The Society has held several instructive meetings, notably two at the Normal School.

Lundy's Lane Historical Society.

Twenty-First Annual Report.

Twenty-one years have passed since the Lundy's Lane Historical Society was called into existence by the Rev. Canon Bull, M.A. After many efforts Canon Bull succeeded in interesting a number of his neighbours in the village of Niagara Falls and the Society was formed with the Canon as its first president. The members enrolled were: —

Messrs. M. M. Fenwick, Charles Patten, George Sootheran, M. B. Morris, E. Morden, George Shrimpton, H. H. Marcon, R. Spong, Fred. W. Ellis. At the meeting the objects of the Society were defined as follows: —

"To collect and preserve all information available pertaining to the early history of this locality and especially to the period of 1812-14; to keep a record of the names of men and women who then served their country, with such other information as may be thought desirable; and to recommend the erection of a worthy memorial of them."

The first action of the Society was to petition the Government to erect "a worthy monument in memoriam of those who in 1814 fought and died on the hill of Lundy's Lane for their country, including the name of Mrs. Laura Secord, who died in after years." The village council were also memorialized to erect suitable directions for the benefit of strangers visiting the battle ground, and as an earnest of their zeal in the work, each member agreed to collect as much historical information as possible and lay it before the Society at the earliest opportunity.

The work has been carried on with vigour to the present time, each year witnessing some achievement. Four thousand pages of very valuable historical matter have been published, contributed by such eminent and well known writers as Mrs. Curzon, Miss Carnochan, Rev. E. J. Fessenden, William Kirby, F.R.G.S., and Col. Cruickshank, whose monumental work on the Documentary History of the campaign on the Niagara Frontier, 1812-14, has evoked such widespread interest and commendation.

Early in the past season the seventh volume of Documentary History was issued, containing 306 pages of letter press and maps, embodying all the contemporary documents which Col. Cruickshank has been able to discover bearing upon the period from August to October, 1813. The greater part of Vol. VIII is also in type; this will cover the period from October to December, 1813.

One of the notable events of the year was the unveiling of a memorial on Queenston Heights marking the spot where Lieut.-Col. McDonnel, Aide-de-Camp to Lieut.-General Sir Isaac Brock, fell on the memorable 13th of October, 1812.

Advantage was taken of the occasion of a visit to the scene of the battle by the 41st Regiment, Brockville, Lieut.-Col. Fisher, commanding, to have the ceremony conducted with a proper military setting. The oration was given by Col. Cruickshank. The memorial, an oval bronze tablet, mounted on a cairn of large boulders, and suitably inscribed, was unveiled by Mrs. Cruickshank, the troops presenting arms and the band furnishing suitable music. A mourning wreath, the gift of the Brockville branch of the Daughters of the Empire was then placed upon the memorial by Mrs. Fisher.

After the ceremony a graphic resume of the battle was given on the heights by Col. Cruickshank.

Simcoe County Pioneer and Historical Society.

Three meetings were held during the year. A volume of historical documents is in the hands of the printer and will be issued at the close of the year. It is proposed to furnish increased accommodation for the museum collection.

Woman's Wentworth Historical Society.

During the year a series of meetings have been held for the purpose of creating interest in the history of Canada. Four of these meetings were held in the homes of different members of the Society. The addresses were given by Miss Fitzgibbon, subject, "Stony Creek," Barlow Cumberland, subject, "The Work of Womens Historical Societies:" C. R. McCullough, subject, "Historical Women of Canada and their Deeds;" F. F. Macpherson, subject, "The National Literature of Canada."

The register of the caretaker at the Battlefield shows a large increase in the number of visitors.

Reading Camp Association.

The Annual Report of the Association for 1905-6, shows that the following Reading Camps were established in Ontario:—

Parry Sound Co's Camp, Orrville, Ont.
Conger Co's Camp, Parry Sound.
Goergian Bay Co's Camp, Coldwater.
Booth's Camp, Cache Bay.
Gordon and Co's Camp, Markstay.
McFadden's Camp, Whitefish.
Reading Camp, Cobalt.

The folowing are some of the Club Houses and Reading Rooms built chiefly by the respective firms co-operating with their employees. Several other firms have also provided accommodation for their men.

Cook Bros' Co's Mill, Spragge, Ont.
The Corringe Club, Copper Cliff.
Loveland & Stone, Cutler.
Creighton Mine. Near Copper Cliff.
Searchmont, Algoma.
W. C. Edwards Co's Mill, Ottawa. Algoma Commercial Co., Gold Rock. La Rose Mine, Cobalt. O'Brien Mine, Cobalt.

A large number of camp instructors are employed during the summer months. They are principally University undergraduates.

During the year 1907, a very large number of Travelling Libraries have been furnished to the Association for use in New Ontario. These libraries have been placed by the Rev. Alfred Fitzpatrick, B.A., Superintendent of Camp Education.

Canadian Free Library for the Blind.

Established at Markham, Ont.

During the year 1906 the attention of the Hon. the Minister of Education, was called to the efforts being made by a number of blind men to establish a Free Library for the Blind. Among the active workers were Messrs F. W. Johnston, E. B. F. Robinson, Benjamin Crew, Carl B. Lloyd, James Common, Alfred Thurlow, J. E. Shaughnessy, A. H. Wilson, E. W. Hermon and Robert Coughlan.

The effort was unique in character, in that it was proposed to establish and manage the library exclusively by the blind. For some years previous an organization, known as the "Associated Blind," had existed. The Association consisted almost exclusively of male graduates of the Ontario Institution for the Blind, Brantford. The object aimed at was to ameliorate the conditions which surround the blind. To the men thus associated the value of a free library, with the books circulating over the Province, could not be over-estimated. Mr. E. B. F. Johnston, M.A., of Markham, had succeeded by purchase and by printing himself in establishing a library composed exclusively of books for the blind. He had struggled to circulate the books, but the pressing demands made upon his time in securing a livelihood, had hampered his efforts and those of the other brave spirits associated with him. After a careful examination of the books on hand, which would enable the library to enter immediately upon its work, the Minister decided to place the sum of two hundred dollars in the estimates for 1907, to help forward the good work. The money was voted by the Legislature, rules and regulations governing the library were prepared by the Department and accepted by the Board of Management and the library opened.

The first meeting of the Board of Management for the establishment of the Canadian Free Library for the Blind was held in Toronto, Nov. 9th, 1906. F. W. Johnston was elected President and E. B. F. Robinson, M.A., Secretary-Treasurer.

The second meeting was held in Toronto, April, 9th, 1907. The third meeting was held April 16th, 1907. At this meeting the Committee in charge of purchasing books from Mr. Robinson reported in favour of securing the following books:—

For General Circulation.

Biographical Sketches, 1 vol.
Bible Helps, Bagster, 2 vols.
The Institution Journal, 3 vols.
Short Stories from Munsey's, 1 vol.
Readings from Artemus Ward, 1 vol.
Amusing Selections, 1 vol.
Rubaiyat of Omar Khayyam, 1 vol.
Gleams of Light, 2 vols.
Advantages and disadvantages of Blindness, 1 vol.
Maury's Physical Geography, 2 vols.
Dairyman's Daughter, 1 vol.

For the Reference Library.

Fawcett's Political Economy, 2 vols.
Dewey's Psychology, 2 vols.
Baldwin's Psychology, 1 vol.
Un Philosophe sous les Toits, Souvestre, 2 vols.
French Vocabulary, 2 vols.
Arnold's Latin Prose Composition, 3 vols.
Caird's Hegel, 4 vols.
British North America Act, 1 vol.
Racine's Andromaque, 1 vol.
Vendersmissen's German Grammar, 2 vols.
German Vocabularly, 1 vol.
Horace's Epistles, (Latin), 1 vol.
Horace's Epistles, (English), 1 vol.
Annals of Tacitus, (Latin), 1 vol.
Annals of Tacitus, (English), 1 vol.
Aristotle's Ethics, 1 vol.
Fowler's Deductive Logic, 1 vol.
Baker's Trigonometry, 1 vol.
Epistle to the Hebrews, (In Moon Type), 1 vol.
The Gospel of St. Mark, (in Japanese), 1 vol.
Mahaffy's Kant, 6 vols.
Green's Prolegomena to Ethics, 8 vols.
Janet's Theory of Morals, 8 vols.
Schwegler's History of Philosophy, 7 vols.

On May 3rd, information was received from the Education Department that the sum of $200. had been placed in the estimates by the Minister of Education and voted by the Legislature to assist the library. Rules and regulations were received from the Education Department and assented to by the Board of Management.

Mr. E. B. F. Robinson, M. A., having resigned as Secretary-Treas. was appointed Secretary and Librarian.

Under the Rules and regulations the library is absolutely free for any blind person in the Province of Ontario. Books for the blind pass free through the Post Office. The library having been opened early in the present year a report of the circulation of the books and the transactions of the Library Board will appear in the next Annual Report of the Hon. the Minister of Education for Ontario.

Board of Management.—Messrs Benjamin Crew, F. W. Johnston, E. W. Hermon, C. B. Lloyd, E. B. F. Robinson.

The First Public Library in the Province.

Ontario owes many debts of gratitude to Miss Janet Carnochan, of Niagara-on-the-lake. Not among the least is her recent contribution published in the transactions of the Niagara Historical Society, pamphlet number six, relating to the Niagara Library. By dint of much patient research Miss Carnochan has gathered evidence which proves that in addition to the honor of having been the home of the first parliament for Upper Canada the historic town of Niagara was the place where the first newspaper was published, the first agricultural society established and the first public library opened. The original minute book of the library records the transactions through the years from 1800 to 1820. When we consider the vicis-

situdes incidental to the years 1812, 1813 and 1815 to which the inhabitants of the Niagara peninsula were subjected we wonder how this library was preserved. The catalogue of books in the library exonerates the members from the modern charge of indulging in light and trashy reading. Books relating to history, agriculture, travel, theology and biography formed the great bulk of the literary diet of the sturdy pioneers, who suffering from fire and sword, were generous patrons of the library.

The first entry in the minute book is:—Niagara Library, June 8th, 1800. It reads:—

"Sensible how much we are at a loss in this new and remote country for every kind of useful knowledge, and convinced that nothing would be of more use to diffuse knowledge amongst us and our offsprings than a library, supported by subscription in this town, we, whose names are hereunto subscribed hereby associate ourselves together for that purpose, and promise to pay annually a sum not exceeding four dollars to be laid out on books as agreed upon by the majority of votes at a yearly meeting to be held by us in this town on the 15th August annually, when everything respecting the library will be regulated by the majority of votes."

Forty one subscribers signed the declaration and thus was born the first public library established in Upper Canada. The first librarian, secretary and treasurer was Andrew Heron who held the offices for nearly twenty years. Two books from the library have been recovered, viz., number 51 in the catalogue, "Blossoms of Morality or Blossoms on Morality," also number 81, "Matthew Henry's Communicant's Companion," 1799. The last named book is now in the possession of the Niagara Historical Society.

The Ontario Library Association.

The importance of the Ontario Library Association has been underestimated in the past, but the value of the work being done is now more fully appreciated. The members comprise the most active library workers in the Province, including librarians, members of library boards, representatives from schools and colleges and seekers after information. Foremost among the good works done should be mentioned the catalogues of books prepared for circulation for provincial libraries. Thousands of copies have been distributed by the Education Department, and the demand is constantly increasing. The seventh annual meeting of the Association was held on Easter Monday and Tuesday, April 1st and 2nd, 1907, in the Canadian Institute, Toronto. The President, Mr. Norman Gurd, B.C.L., opened the meeting with a practical address in which he grappled with the faults and shortcomings of our public libraries and suggested the remedies which should be applied.

The report of the Secretary, Mr. E. A. Hardy, B.A., furnished evidence of the growth of the Association and the beneficial effects arising from an annual interchange of views and methods among library workers. Mr. Hardy suggested that in view of the excellent work being done it was but fair that the grant to the Association should be increased. With this view I heartily concur.

A special feature of the meeting was the reading of papers relating to the purchase of books for public libraries. Papers were read by Mr. A. W. Cameron, M.A., Streetsville; Mr. James Speereman, Sarnia; J. D. Barnett, Stratford; Miss Carrie A. Rowe, Brockville; Miss Sutton, Smith's Falls; Mr. L. J. Burpee, B.A., Ottawa; Albert Sheldrick, Chatham; Mr. W. J. Robertson, M.A., St. Catharines.

A full report of the proceedings of the meeting has been published by order of the Hon. the Minister of Education. Copies of the report can be obtained by addressing the Education Department, Toronto.

Public Library Institute.

In consequence of a small additional grant having been made to the Ontario Library Association by the Legislature, the executive of the Association decided to hold a Public Library Institute at some convenient point. The object aimed at was to awaken interest in the library movement by securing the attendance of local librarians and members of library boards. A committee consisting of Messrs. Norman Gurd of Sarnia, E. A. Hardy of Toronto, and A. W. Cameron of Streetsville, was appointed. On the invitation of the Brantford Public Library Board it was decided to hold the first Institute in Brantford, on Thursday, July 11th. An active local committee immediately began work under the direction of Mr. E. D. Henwood, librarian of the Brantford Public Library. Morning, afternoon and evening sessions were held. The executive of the Ontario Library Association met the previous evening and completed arrangements for the Easter convention.

The following delegates reported at the Institute meeting: A. W. Cameron, Streetsville; Effie A. Schmidt, Berlin; Rev. A. W. Bradley, Berlin; T. W. H. Leavitt, Toronto; E. A. Hardy, Toronto; F. D. Goodchild, Toronto; A. B. Macallum, Toronto; Norman Gurd, Sarnia; W. J. Robertson, St. Catharines; A. Hayes Jackson, Simcoe; Wm. Imrie, Tillsonburg; Lawrence J. Burpee, Ottawa; Albert Sheldrick, Chatham; G. C. Malcolm, Scotland; Rev. T. R. Clark, Drumbo; M. Steele, Tavistock; A. G. Millard, Galt; R. Alexander, Galt; Paul Wickson, Paris; Rev. Father Crinnon, Paris; James Smiley, Dolt; Thomas Lewis, Jarvis; B. F. Palmer, New Durham; W. F. Moore, Dundas; Bella Jardine, Hespeler; Jennie D. Jardine, Hespeler; Dr. E. E. Kitchen, St. George; J. D. Barnett, Stratford; Judge Hardy, Brantford; W. Churchill Livingston, Brantford; Dr. B. C. Bell, Brantford; Rev. Father Lennon, Brantford; J. W. Bowlby, Brantford; W. G. Raymond, Brantford; E. D. Henwood, Brantford.

The meeting was called to order by Mr. Norman Gurd, B.C.L., President of the Ontario Library Association. Mr. Gurd delivered a carefully prepared paper on "Co-operation in Library Work." Particular attention was devoted to the problems incidental to conducting a small library.

Mr. A. W. Cameron, B.A., Streetsville, selected as his subject, "What a Small Library has Accomplished." He gave an interesting history of the Streetsville library, dwelling upon the financial problems of the small library, the difficulties to be overcome, modern methods of classification, and the movement by which the village of Streetsville had secured within the short time of five years a permanent home for the library and the library made free. The strong feature of the Streetsville library, in the circulation of books, was explained by reference to the establishment of branches at Meadowvale, Erindale and Cooksville, to each of which one hundred books are sent monthly by the central library. In the opinion of the delegates Streetsville boasts the most efficient small library in the Province.

Mr. E. A. Hardy, Toronto, Secretary of the Ontario Library Association, addressed the conference on "The Selection and Purchase of Books." Mr. Hardy's treatment of this important subject was eminently practical, being based upon long experience. A discussion followed which was participated in by many of the delegates, particularly those representing small libraries.

An evening session was held in Victoria Hall. Mayor Bowlby opened the meeting with a short address in which he cordially welcomed the delegates to Brantford. Mr. W. G. Raymond made an excellent speech on the educational value of public libraries. He outlined the benefits which attach to free access to the best books—the storehouses of the discoveries, achievements and progress of the human race from barbarism to modern civilization. Judge Hardy spoke on the financial problems of the public library, drawing his conclusions from actual experience. As he has long been one of the most active workers and advanced thinkers in library work in Ontario, his conclusions were pregnant with facts calculated to encourage the delegates.

Mr. Leavitt, Inspector of Public Libraries, took up the subject, "The Children in the Library." He pleaded for the abolition of the age limit in every library, pointing out that at an age when impressions are so quickly made and so indelibly it is of supreme importance that the child should have good companionship, the best companionship being found in the world of books. As a concrete example a description of the children's department in the Sarnia Public Library was given. The establishment of the "Story Hour" was advocated and illustrated by a story being told.

A permanent Library Institute was formed for the Brantford District. The district comprises the Counties of Brant, Oxford, Wentworth, and Norfolk, with the following officers:—

President—Dr. E. E. Kitchen, St. George.

Secretary—E. D. Henwood, Brantford.

Executive—Dr. Steele, Tavistock; Wm. Imrie, Tillsonburg; Rev. Mr. Clark, Drumbo; Miss Jackson, Simcoe; Miss Watson, Dundas.

The success of the Institute was in a great measure due to the untiring energy of Mr. Henwood, the secretary of the local committee. Mr. Henwood was cordially seconded by the citizens of Brantford. The delegates were entertained at luncheon at the rooms of the Y.W.C.A. Mr. W. Churchill Livingston also extended his hospitality by inviting all present to a garden party which was held in his handsome grounds.

Arrangements are being made for holding several Library Institutes in various parts of the Province, at convenient points, during the summer of 1908.

Publication of a Quarterly Bulletin.

For some years past the Ontario Library Association has prepared lists of books suitable for use in Public Libraries. These lists have been published and circulated by the Education Department. While admirable in character and well suited to the purpose for which they were intended, experience has demonstrated that the plan is defective in one important particular, viz., a considerable time elapses in the preparation, with a further period while the copy is in the hands of the printers. The result is that the up-to-date libraries find that they have secured many of the books indicated before the catalogue is received. In other cases, though the exact book has not been purchased, some other, and probably an inferior book has been bought and the sum at the disposal of the purchasing committee has been exhausted.

It is evident that the system could be improved upon by the publication of a Quarterly Bulletin devoted to the purpose. I have communicated with the President of the Association relative to the proposed change and it meets with his cordial approval. The Bulletin could be prepared under the auspices and with the assistance of the Executive of the Association, aided by the librarians of the leading public libraries in the Province. It is the custom in

several libraries for the librarian to prepare lists of the books which it would be advisable to purchase. These lists are made up by carefully examining the reviews of recent books which appear in the most reliable magazines, periodicals and newspapers. If only one or two books for a section can be bought the list shows from five to ten from which the choice can be made by the purchasing committee. When the committee meets the list is gone over and the book which best answers the purpose is chosen. In preparing the Bulletin the copy would consist of the lists sent in from the various libraries. By this means the delay incidental to the present system would be avoided. Libraries all over the Province would be placed in touch with each other and the general selection improved. The smaller libraries would be furnished quarterly with a reliable guide from which purchases could be made with safety. A consderable percentage of the money now practically thrown away upon worthless publications would be saved and the efficiency of the library improved. In addition to the lists, the Bulletin could be utilized for making public Departmental announcements, the meetings of the Ontario Library Association, notices relative to Library Institutes, together with views of modern library buildings with interior plans and such other information considered advisable by the Minister of Education and the Executive of the Association. As the Bulletin would be mailed free to every library in the Province and also to each High and Public School Inspector, it could be used for announcing the lists of books authorized for use in the High and Public School libraries. The cost to the Province would not materially exceed the expense now incurred in publishing the catalogue for the Ontario Library Association.

Libraries on Library Construction and Library Administration.

During the year two Special Libraries have been assembled by the Department.

The library on construction consists of the latest publications in the United States devoted to library building and equipment. The works include views and plans of most of the Carnegie library buildings. The plans are of exceptional value, having been supplied by the architects who designed the buildings. Illustrated publications and catalogues furnish hints as to equipment, including stacks, tables, modes of lighting, chairs, systems of heating, etc.

The library on administration contains the well known publications of Mr. Melville Dewey, giving explicit instructions relative to the Dewey Decimal system of classification and card cataloguing.

Several books relating to the Cutter expansive system are included, thus furnishing the data upon which libraries may be catalogued under the Cutter plan. A variety of pamphlets have been secured which furnish admirable hints relative to the detail work necessary in conducting a public library. These libraries have been in constant demand since they were prepared. They are loaned by the Department to library boards free from charge and shipped in substantial cases.

Cataloguing.

I note with pleasure that a considerable percentage of the library boards, particularly in the centres of population, have awakened to the necessity which exists for cataloguing their libraries in accordance with one of the modern systems. Card catalogues are being adopted and the expensive and cumbersome printed catalogue discarded.

I trust that during the year the Education Department will be able to assist local libraries in this important work by furnishing, free, the assistance of a skilled cataloguer for a limited time, but sufficiently long to enable the local librarian to continue and complete the work.

It is desirable that local boards should bear in mind, in this particular, that the present salaries paid to librarians are generally inadequate and that extra work should not be imposed without extra remuneration. The duties of preparing a complete card catalogue are arduous and highly technical in character. If the help is obtained freom outside sources it must be handsomely paid for, consequently should the bulk of the work be performed by the librarian adequate remuneration should be forthcoming. The knowledge acquired of the contents of a library, while preparing a modern catalogue, will be of the greatest value to the members of the library in the future arising from the experience gained by the librarian.

Cataloguing a Small Library.

Small libraries may be classified by the librarian to meet the needs, provided the work is done according to an accepted system. The Dewey Decimal System is exceedingly simple and is in very general use, except for fiction, which is generally classified under the Cutter System.

The decimal system divides the field of knowledge into nine main classes, which are numbered 100 to 900. Encyclopedias, periodicals, etc., general in character, form a tenth class, 000.

Classes.

000 General Works.	500 Natural Science.
100 Philosophy.	600 Useful Arts.
200 Religion.	700 Fine Arts.
300 Sociology.	800 Literature.
400 Philology.	900 History.

Each of these ten classes is sub-divided into ten divisions, viz.:

000 *General Works.*

010 Bibliography.	060 General societies.
020 Literary economy.	070 Newspapers.
030 General encyclopedias.	080 Special libraries.
040 General collections.	090 Book rarities.
050 General periodicals.	

100 *Philosophy.*

110 Metaphysics.	160 Logic, Dialectics.
120 Special metaphysical topics.	170 Ethics.
130 Mind and body.	180 Ancient philosophers.
140 Philosophical systems.	190 Modern philosophers.
150 Mutual faculties, Psychology.	

200 *Religion.*

210 Natural theology.	260 Church, Institutions, Work.
220 Bible.	270 Religious history.
230 Doctrinal theology, Dogmatics.	280 Christian churches and sects.
240 Devotional, Practical.	290 Ethnic—Non-Christian.
250 Homiletic, Pastoral, Parochial.	

300 *Sociology.*

310 Statistics.
320 Political science.
330 Political economy.
340 Law.
350 Administration.
360 Associations and institutions.
370 Education.
380 Commerce, Communication.
390 Customs, Costumes, Folk-lore.

400 *Philology.*

410 Comparative.
420 English.
430 German.
440 French.
450 Italian.
460 Spanish.
470 Latin.
480 Greek.
490 Minor Languages.

500 *Natural Science.*

510 Mathematics
520 Astronomy.
530 Physics.
540 Chemistry.
550 Geology.
560 Paleontology.
570 Biology.
580 Botany.
590 Zoology.

600 *Useful Arts.*

610 Medicine.
620 Engineering.
630 Agriculture.
640 Domestic economy.
650 Communication, Commerce.
660 Chemical technology.
670 Manufactures.
680 Mechanic, trades.
690 Buildings.

700 *Fine Arts.*

710 Landscape gardening.
720 Architecture.
730 Sculpture.
740 Drawing, Decoration, Design.
750 Painting.
760 Engraving.
770 Photography.
780 Music.
790 Amusements.

800 *Literature.*

810 American.
820 English.
830 German.
840 French.
850 Italian.
860 Spanish.
870 Latin.
880 Greek.
890 Minor languages.

900 *History.*

910 Geography and travel.
920 Biography.
930 Ancient history.
940 Modern Europe.
950 Asia.
960 Africa.
970 North America.
980 South America.
990 Oceanica and Polar Regions.

Decrease in the Purchase of Fiction in 1907.

A careful examination of the Annual Reports for the year 1907 shows that the fiction purchased by public libraries, for the current year, has decreased by fully 20 per cent. The decrease probably exceeds this sum, but owing to the complicated nature of the former classification, it is exceedingly difficult to arrive at the exact figures. The change for the better is very gratifying to all lovers of good books and to all who have the success of the library movement at heart. The result has been attained, first, through the influence of the Ontario Library Association by the publication of general catalogues of books for the years 1905 and 1906; also by the publication of a catalogue of children's books. Several thousands of the catalogues have been mailed to the officers of public libraries in the Province by the Education Department. In addition, the Executive of the O. L. A. and many of the librarians of the higher tpye of libraries, with members of advanced library boards, have been untiring in their efforts to bring about the much needed reform. The second influence has been the abolition of the ancient system of classification under which the grant was formerly paid. A most effective plan for weeding out worthless fiction has been adopted by many libraries. It consists in not replacing worthless works of fiction. Borrowers are informed by the librarian, when asking for books of little or no worth, that they are worn out, but attention is called to some other work with the assurance that it is much preferable and will give satisfaction. This course continued for a few months results in the demand for the poorer books virtually disappearing.

The public libraries have climbed the first hill, but the end is not yet. The campaign of education must be continued. Large numbers of well meaning people still continue to regard the public labrary as a popular and expensive fad. The free library movement is passing through the same phases which confronted the free school problem. Practically the arguments used in opposition to the establishment and maintenance of free public libraries are based upon the same reasons which did duty for the onslaught made upon Dr. Ryerson's proposals to make the public school the house with the open door.

Unfortunately, in the recent past, many of our public men and some of our newspapers did not hesitate to declare that the principle use of a public library was to supply sentimental school girls and sentimental married women with vapid novels and to furnish a few men with books which not one citizen in 500 cared to read and not one in a thousand could understand. In short, the indictment read, the public library is a means for amusing those who are too lazy to work. The time is not far distant when it will be acknowledged by all who are competent to judge that the free public library is just as essential for the intellectual health and development of the people as it the public school, the college and the university. It is but a question of time when the public library will become the peoples' university.

How to Abolish the Fiction Evil.

It is admitted that the circulation of trashy fiction by public libraries is an evil. The origin is not far to seek. The demand arises from the intellectual incapacity of the average reader. To instantly abolish the demand it would be necessary to abolish the individual. Drastic measures which would prevent the purchase of the books for public libraries might be resorted to but it would not abolish the evil, it would simply divert it

into other channels. The appetite would remain and the chances are that the votaries would resort to the purchase of a tpye of books still more lower in grade and more destructive to good taste than are those found in the library. It should be borne in mind that under the free library system all classes are taxed for the support of the library, consequently it is but just that some return should be made for the money contributed, so long as the books demanded are not immoral or calculated to do positive harm. The remedy lies in increasing the average intellectual capacity. How can this be accomplished?

Partly by a campaign of education, partly by departmental regulations, but principally by the training of the children.

If all our public libraries were divided into two sections, and one section devoted exclusively to books for adults, the other to books for children, the first impartant step would have been taken. Library boards would then find themselves face to face with a new problem. A system for the proper division of the funds available for the purchase of books would have to be devised and acted upon. The librarian in preparing the lists for future purchases would of necessity become better acquainted with the catalogues devoted to children's books, and, therefore, qualified to estimate the relative worth of the books required for the juvenile department. The junior section would naturally, following in the footsteps of the senior section, become a well balanced library, instead, as at present a heterogeneous mass of badly selected odds and ends. A few months after the change was made it would become apparent to every member of the library board that the children were not only willing but anxious to read books of intrinsic value. The demand would not only arise but it would increase. When the child left the junior section of the library and entered the senior section, a patron of the library would have been added who had no craving for trashy fiction. The literary taste once acquired is never lost, it lasts as long as life.

Travelling Libraries.

For a few years anterior to 1907 the Education Department supplied a limited number of travelling libraries exclusively for use in reading camps in New Ontario. Under the system then in vogue the libraries were frequently removed from one camp to another without first being returned to the department. An examination of the records shows that when the library was returned many of the books had been lost. When attempts were made to collect the cost it was found impossible to locate the camp responsible. In a number of instances no trace could be found of the library. Confronted by such conditions the Minister of Education decided that the practice of permitting a library to be forwarded to a second camp, without first being returned to the department and there checked over, should be discontinued. Under the new regulations no loss has fallen upon the department.

With the extension of the travelling library system the new rule has been rigidly applied to travelling libraries sent to small public libraries and to villages where public libraries have not been established. One objection urged against the system is that the transportation charges are considerably increased, as each borrower is compelled to pay the charges from Toronto to destination, the return charges being paid by the department. The experience gained in the past by the department is strongly supplemented by the experience gained by Library Commissions in the United States, where the travelling library system is carried on upon an extensive

scale. It is found that the plan of having the books returned directly to headquarters is by far the cheapest in the end, and at the same time it saves endless disputes and correspondence requiring additional clerical help at headquarters.

The Legislature, during the session of 1907, generously voted $3,000 for travelling libraries. In the past such libraries had been sent out in boxes. This plan developed two faults. First, the constant changing of the books into and out of the box resulted in greater damage than the actual wear while in the hands of the readers. Second, a borrower lost time in selecting a book having to take each book up before he could see the title. To remedy these evils cases were secured, holding on an average about 50 books. Each case contained a moveable shelf, thus providing for books varying in length. The cover was hinged and fastened with a lock. When the case is opened the cover forms a small table upon which the books can be examined, while all of the titles are immediately exposed at a glance. Locks with duplicate keys are used, one key being retained in the department, the other sent by mail to the borrower. A simple register is included in each case for recording the circulation. This register furnishes the data upon which the return is made to the department, thus showing the circulation of the books in each locality in which the library has been in use.

For the convenience of the public and to meet the wants of diverse interests and communities it has been found advisable to divide the travelling libraries into two classes, viz., the fixed collection and the open shelf selections.

The fixed collection represents a miniature public library suitable for average communities. The problem is to furnish wholesome, instructive, and readable books which the general public will read. Each library contains a few books calculated to set people thinking. All attempts made in the United States to load travelling libraries down with serious literature have ended in failure and no good reason has been advanced why the experiment should not end in the same way if attempted in Ontario. The fixed collection is in use for about 90 per cent. of the libraries loaned by the department. Care is taken not to duplicate the books when more than one library has been sent to the same place during the year. When the fixed collection is forwarded to a small public library it is impossible to avoid some duplications but generally speaking but few complaints have been received in this particular. During the year 1907 a typewritten catalogue of the books has been pasted on the inside cover of each case (to avoid the expense of printing), hence it has been found impossible to furnish intending borrowers, in advance, with a catalogue of the books which can be loaned. It is proposed during the current year to overcome this defect by having catalogues printed for each case. These catalogues can then be mailed in advance to intending borrowers and the selection made.

Open shelf collections. These libraries are intended to supply borrowers with books required for special purposes and are suitable for different needs. Usually the open shelf libraries are composite in character but especially selected to meet the wants of the locality to which they are sent. A limited number of libraries, specific in character, have been prepared; notably libraries containing books relating to the various trades and industries of some town or village. The demand for such libraries exceeds the supply but gradually it is hoped that the defect can be remedied by additional purchases. The demand for such books comes from young men employed in manufacturing industries who are desirous of becoming expert mechanics. During the past five years several hundred thousand dollars

have been remitted by this class to schools of correspondence established in the United States. Once it becomes known that the text books required can be secured at the public library, free, the practice of remitting to a foreign country ceases.

At present the number of travelling libraries is limited in proportion to the population and territory to be supplied consequently duplication is easily avoided. In the near future it will be necessary to divide the Province into districts in each of which will circulate not less than ten libraries free from duplications.

In the United States travelling libraries are usually made up with fifty per cent. of fiction. The libraries sent out by this department contain on an average only 33 per cent. of fiction. Special attention has been given to the selection of books for children. Many of the juvenile books will undoubtedly be read by adults who have not fully acquired the reading habit. So far as has been possible, considering the limited number of books at the disposal of the department, careful attention has been given to the conditions existing in the community to which each library is sent. Libraries going into the Cobalt district have contained some books relating to prospecting, the nature of minerals, etc., while libraries for the lumber camps have been made rich in adventure, nature study books and travel. In several districts in New Ontario large and compact communities of workingmen of foreign birth have been encountered. To such localities libraries have been loaned strong in books for children, containing in addition primary readers, spelling books, copy books, pens, pencils, paper especially selected to help foreigners to acquire a knowledge of the English language. It is gratifying to note that the returns received from such camps show that the foreign element has taken advantage of the means placed at its disposal and that the progress made has been highly encouraging.

Experience has already demonstrated that the greatest difficulty connected with the circulation of travelling libraries arises from the apathy of the general public. The communities which need the books the worst are extremely slow in finding out the conditions under which the books can be had. Isolation has, however, its advantages as well as its disadvantages. The farmers' children, once they are provided with healthy reading, usually make greater progress than children in towns and cities. If we can educate the adults to order the books the children will educate themselves. The returns for 1907 demonstrate that the circulation of the better class of books is larger in the wilds of New Ontario than in some towns in the older parts of the Province. This condition probably arises from the obstacles which exist in securing books of any class.

Owing to the scattered settlement in New Ontario and the limited number of public libraries which have been established special attention has been given to the wants of the people. Travelling libraries have been loaned to the small villages for the establishment of reading camps, the books being issued free to the residents of the village and also to the farmers who reside in the vicinity. It is difficult to spread information about the libraries in such sections, particularly in the most remote districts. Frequently it is impossible by letter to secure a librarian, and the attempt to introduce a library fails in consequence. Once a reading camp is established in such places the returns show that the circulation of the books is abnormally large in proportion to the number of people, thus proving that the demand for books exists. To accomplish the object aimed at by travelling libraries a worker should be sent out to the back districts from the Education Department whose duty should be to carry the news into the most out-

of-the-way places. He should take a number of travelling libraries along with him, and in each hamlet call the people together, explain the workings of the system, secure a Board of Management and librarian and establish a camp. Once these results have been attained the people can be depended upon to continue and improve the library work. In time, as the population increases the camp will grow into an established public library. Every reading camp is a centre presenting opportunities for self-help which can be provided in no other way. Travelling libraries are no exception to the rule. Like all other good things they must be pushed. To create a demand the people must be educated. This can best be accomplished by sending out an organizer fully qualified and equipped for the work. Such an organizer should possess a practical knowledge of advertising and be able to secure the confidence and good will of the people.

Picture Libraries.

The value of pictures, particularly for children, has not been appreciated by the library boards in Ontario, except in rare instances. Where a children's room has been provided or a section of the library has been set apart for the exclusive use of little folks the walls should be adorned with attractive pictures. In addition, it would be advisable for this department to make a collection of pictures to be loaned for a limited period to Public Libraries. After the child has become familiar with a picture interest diminishes and finally ceases, but if the picture is a work of art the educational effect is permanent.

A portfolio of pictures could be used in at least twelve Public Libraries in a year with excellent results.

Study Clubs.

The practice of forming Study Clubs for the purpose of studying a single subject or some phase of a subject is growing. To assist such clubs a limited number of libraries have been prepared and loaned and can be obtained upon application.

Libraries for Children.

Examination of many of the libraries of the Province has convinced me that our libraries are weak in good books for children. In many instances the evil has arisen from a false conception of the duties of library boards. In some localities the impression prevails that it is not part of the duty of the public librarian to encourage children to secure books at the library. The argument made use of in support of this theory is, "Children should obtain their books under the supervision of their teachers, and then, only from the School Library." Fortunately this pernicious impression or practice is rapidly disappearing. The object lessons furnished by the Sarnia and other progressive libraries in the matter of the children's section of libraries have awakened many library boards to a keen sense of their responsibilities in this particular. To assist in stamping out the evil, and as object lessons, two libraries made up exclusively from books in actual use in the Sarnia Public Library were prepared. The books were catalogued by Miss Spereman of the Sarnia library, under the Dewey Decimal System. So great was the demand for these libraries that it was deemed wise to supplement the effort by additional libraries exclusively for children. After securing and circulating such libraries invariably the local boards have decided to strengthen the children's sections of their libraries.

Record of Good Work.

Attention is called to the following return made by the Sarnia Public Library. It proves conclusively that the most effective method for curtailing the percentage of fiction read in a library is to educate the children by establishing a children's room or department in every Public Library. When the children of Sarnia leave the juvenile branch and are admitted to the adult section they will have acquired the reading habit for the higher type of books; a habit which never is lost.

Circulation Record of the Sarnia Public Library.

July 1st to December 31st, 1907.

Juvenile.

Class.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Fiction	545	431	462	455	632	504	3,029
Philosophy							
Religion	5	5	6	6	7	12	41
Sociology	47	40	82	49	114	100	432
Natural Science	30	16	41	41	67	65	260
Useful Arts	7	8	11	14	17	19	76
Fine Arts	8	8	6	11	12	11	56
Literature	12	26	17	19	25	18	117
History	24	16	19	25	31	21	136
Travels	67	28	34	59	99	96	383
Biography	22	12	15	37	42	31	159
							4,689

Adults.

Class.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Fiction	1,762	1,533	1,535	1,867	2,308	2,092	11,097
Philosophy	6	1	5	7	6	6	31
Religion	7	10	11	11	7	13	59
Sociology	10	9	7	13	19	11	69
Natural Science	19	13	16	19	29	37	133
Useful Arts	4	5	8	9	14	13	53
Fine Arts	6	7	5	5	7	6	36
Literature	20	16	12	26	44	35	153
History	9	14	13	29	35	20	120
Travels	24	18	14	37	56	50	199
Biography	25	21	23	63	64	44	240
							12,180

Total number of books issued in the Children's Room, was 4,689 of which 3,029 were fiction, and the remainder, 1,660 non-fiction.

Total number of books issued in the Adult's Room, was 12,180, of which 11,097 were fiction, and the remainder, 1,083, non-fiction.

This shows that the children have read 577 more non-fiction books than the adults.

Patricia Spereman.
Children's Librarian.

Sarnia Public Library,
Jan. 2, 1908.

Future of Travelling Libraries.

I applied to the Hon. Minister of Agriculture for Ontario and also to the Hon. Minister of Agriculture for the Dominion for donations of bound copies of books published by their respective Departments which were of especial interest to farmers. In both instances the request was complied with. These books, include Reports of the Ontario Agricultural College, publications relating to fruit growing, Farmers' Institutes, etc., and a beautiful illustrated manual entitled "Farm Weeds."

During the year 1908 it is proposed to enter upon a system of missionary work in the outlying portions of the Province, educational in character, in which the value of Travelling Libraries will be brought to the attention of the public. In old Ontario are scattered many towns and large villages which are still without a public library. In the near future it will be necessary to have such places visited and attention directed to the necessity which exists for action being taken to supply the public with books.

Circulation of Travelling Libraries.

The Travelling Libraries loaned by the Department during 1907 contained 5,141 books. It is impossible at the present date, to ascertain the total circulation as the libraries are all in use and the Registers showing the circulation have not yet been received. The demand for the libraries exceeds the supply, but with additional grants from year to year made by the Legislature it is hoped that by 1910 the Education Department will be able to furnish sufficient books to meet the demand.

The following extracts taken, from a circular issued by the Department, outlines the policy governing Travelling Libraries.—

(*a*) A careful examination of the Annual Report of Public Libraries for the year 1907 will be made by the Inspector of Public Libraries at the end of the official year, December 31st, 1907, and upon the results shown in that report will be based the decision as to the advisibility of lending a travelling library or libraries for the year 1908.

(*b*) The Library which has not by local effort purchased any new books during 1907 cannot reasonably expect to secure a travelling library for the following year.

(*c*) Under this rule Public Libraries which neglect to forward to this Department the Annual Report by the 15th day of February, will be rigidly excluded from participating in the benefits afforded by a travelling library.

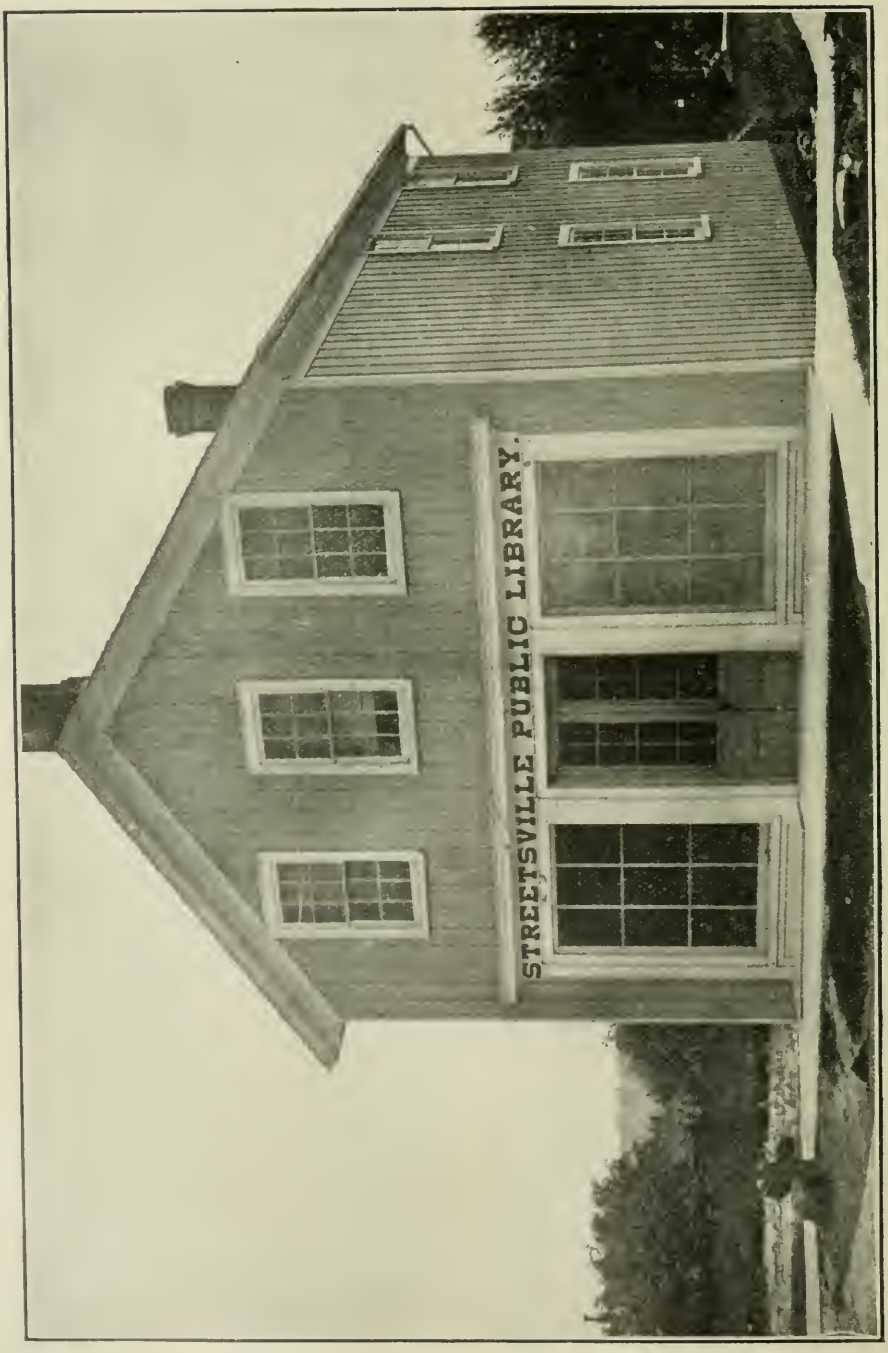
(*d*) It is the aim of this Department to increase the number of travelling libraries during the years 1908-1909, so that it should be possible to supply small libraries with from two to four travelling libraries during each year.

Travelling Libraries were sent to the following places:—

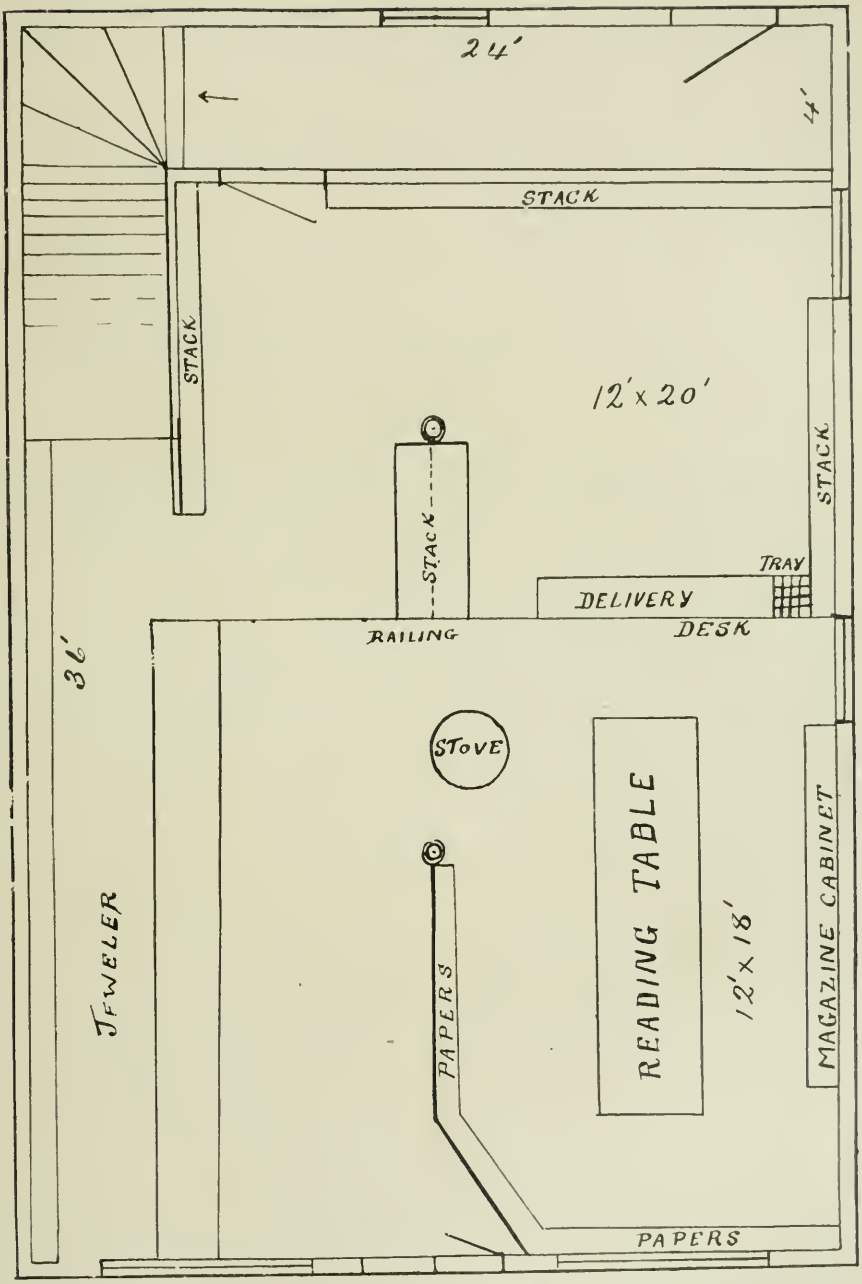
Abingdon	1 Case	Beachville	1 Case
Allan's Mills	1 "	Belleville	1 "
Alliston	1 "	Bessemer	1 "
Almonte	2 "	Bobcaygeon	1 "
Angus	1 "	Bonfield	1 "
Ayr	1 "	Bowmanville	1 "
Ayton	1 "	Brantford	4 "
Bala	1 "	Bridgeburg	1 "
Bancroft	1 "	Brockville	1 "
Barrie	1 "	Bruce Mines	1 "
Bath	2 "	Buda	1 "

Travelling Libraries were sent to the following places:—*Continued.*

Burgess Mines	1 Case	Meldrum Bay	1 Case
Canfield	2 "	Metcalfe	1 "
Callender	1 "	McDonald's Corners	1 "
Cardinal	2 "	Middleville	2 "
Carp	1 "	Mildmay	1 "
Chapleau	1 "	Millbrook	1 "
Cobalt	2 "	Micheal's Bay	1 "
Cockburn Island	1 "	Millgrove	2 "
Coldsprings	1 "	Mono Road	1 "
Cornwall	1 "	Murillo	1 "
Cutler	1 "	Nairn Centre	1 "
Deception	1 "	Newburgh	2 "
Douglas	1 "	New Liskeard	1 "
Dromore	1 "	New Lowell	1 "
Dryden	1 "	Norwich	1 "
Dundas	4 "	Norwood	2 "
Elizabethville	1 "	Oakwood	2 "
Elphin	1 "	Oddessa	1 "
Emo	1 "	Otterville	1 "
End of Steel	1 "	Ouimet	1 "
Engleheart	1 "	Palmerston	2 "
Fitzpatrick's Bay	1 "	Parkhill	3 "
Flesherton	1 "	Parry Sound	3 "
Forester's Falls	1 "	Poland	1 "
Fort Stewart	1 "	Port Carling	2 "
Frankfort	2 "	Port Elgin	1 "
Giroux Lake	1 "	Port Rowan	2 "
Golden Lake	1 "	Port Stanley	1 "
Gorrie	2 "	Queensboro'	1 "
Grand Valley	1 "	Ridgetown	2 "
Grantham	1 "	Richmond Hill	2 "
Grimsby	1 "	Ripley	1 "
Harrington	1 "	Rodney	1 "
Hawkesville	1 "	Scotland	1 "
Honeywood	1 "	Shequiandah	1 "
Huntsville	2 "	Spanish Mills	1 "
Inglewood	2 "	Springfield	1 "
Jarvis	2 "	Stayner	2 "
Kaministiquia	1 "	Stouffville	1 "
Kenora	1 "	Streetsville	3 "
Komoka	1 "	Tilbury	1 "
L'Amable	1 "	Tillsonburg	1 "
Lake Charles	1 "	Thamesford	2 "
Lanark	1 "	Toronto Junction	1 "
Lefroy	2 "	Tottenham	2 "
Lindsay	1 "	Tweed	4 "
Listowel	1 "	Wahnapitae	2 "
Lynden	1 "	Walton	1 "
Maple	1 "	Wardsville	1 "
Margack	1 "	Warkworth	1 "
Markstay	1 "	Waterdown	2 "
Marmora	1 "	Woodbridge	1 "
Melbourne	1 "	Worthington	1 "



Streetsville Public Library.



PUBLIC LIBRARY AT STREETSVILLE.

Streetsville Public Library.

In 1851 an Act was passed in Ontario for the incorporation of Mechanics' Institutes, and on April 3rd, 1854, the Streetsville Library was established. In that year only ten libraries received government grants.

The library was moved into the building which it occupies at present on November 1st, 1901. This building was in part a donation from Mrs. Cunningham, the board paying only $200 for it. Since then Mr. John Cunningham of Edmonton has presented the Library Board with two lots adjoining the library site on the front street.

The library was made a Free Library on July 1st, 1902. The first board consisted of W. Taylor, Reeve; Rev. Dr. Pidgeon, Dr. T. J. Bowie, W. J Graydon, Rev. A. B. Hames, W. G. Webster, A. W. Cameron. In the same year Toronto Township was received into affiliation and granted Free Library privileges on payment of an annual grant. The following year branches were established at Cooksville, Erindale and Meadowvale.

Note by Inspector.

"The Streetsville Public Library, considering its limited revenue and the small population of the place, is, probably, the most successful small library in Ontario. The classification is modern and the circulation of the books much higher than the average in similar places."

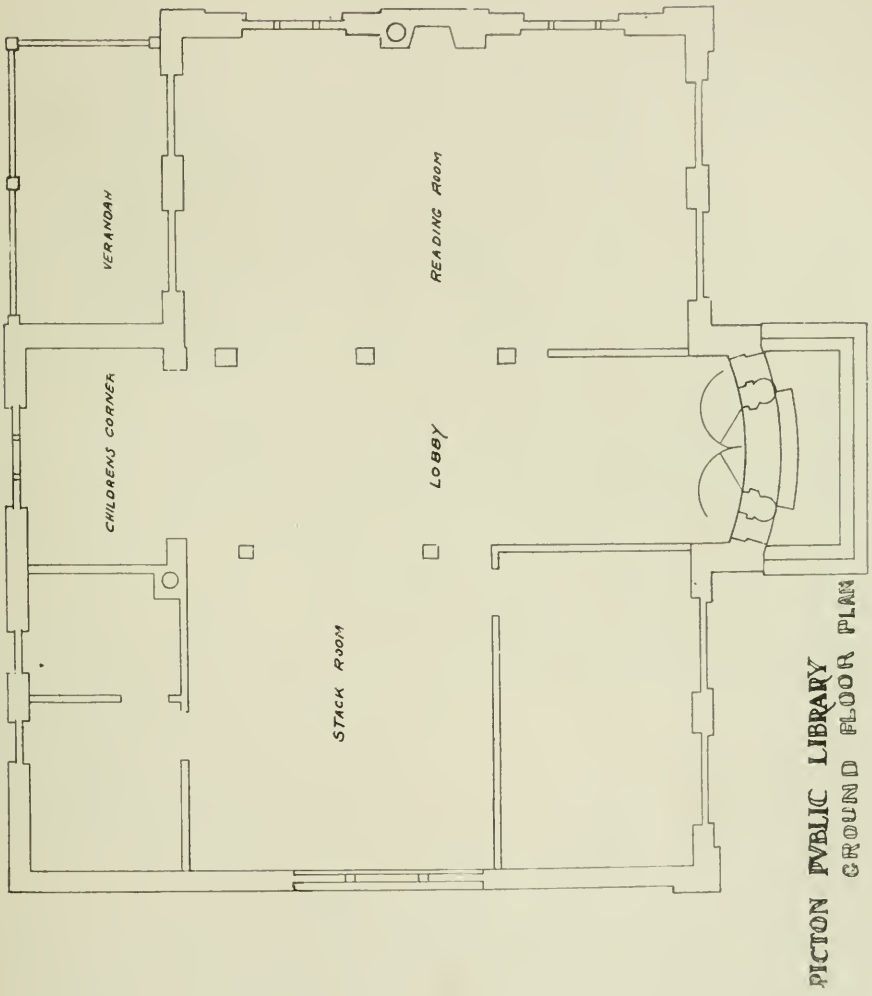
Library, when opened, Free Library, July 1st, 1902.
Materials used in constructing building, wood.
Materials used in finishing interior, wood.
Brief description of the building; state size: 24x40.
Basement; number of rooms and use; size of each room: none.
Ground floor; number of rooms and use; size of each: one hall 22x32.
Ground floor; height of ceiling: 10 feet.
Second floor; number of rooms and use: lecture room 22x34.
Second floor; height of ceiling: 8 feet.
Material used for book stacks: wood.
Cost of building, exclusive of site: $200.00.
Value of site: $200.00.
Cost of furnishings: $50.00.
System of heating: coal stove.
Official staff at time of opening: C. Hollingshead, Librarian.
Is free access to books permitted? Yes.
Age limit, if any: none.
Is printed or card catalogues used? Decimal system; card catalogue is being installed.
Mention any defects in building for library purposes: Too small.

Picton Public Library.

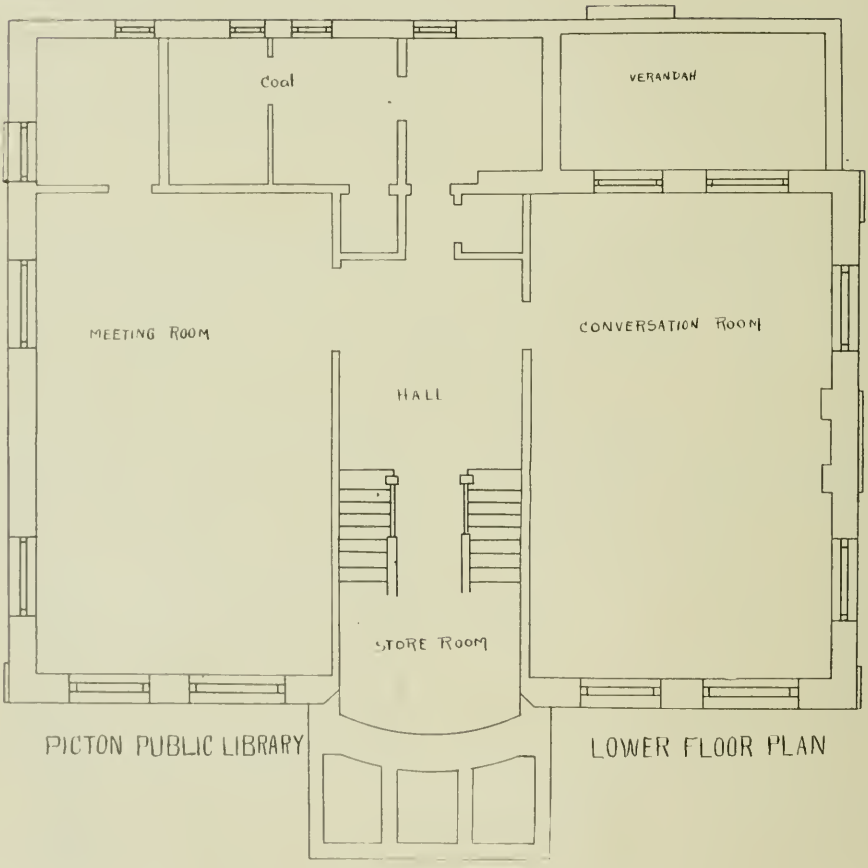
Early in the year 1906 the secretary of the Library Board was instructed to communicate with Mr. Andrew Carnegie in reference to securing a grant for the erection of a new library building. Mr. Carnegie consented to furnish $10,000 upon the usual terms for maintenance being complied with. The town council took action and passed the necessary resolutions.

A very desirable site was secured on Main St., near the centre of the town. The contract was let and work commenced, but it was found that the gift was not sufficient to complete and equip the building. Mr. Carnegie then increased the donation by $2,500.

The building is brick with a cut stone front. Size of building, 56x44-6.



Picton Public Library—Ground Floor Plan.


Coal
VERANDAH
MEETING ROOM
CONVERSATION ROOM
HALL
STORE ROOM
PICTON PUBLIC LIBRARY
LOWER FLOOR PLAN

Basement.

Conversation room, 32x20; lecture room, 32x20; men's lavatory, 3-6x10; furnace room, 15-10x10; packing room, 8-6x10; fuel room, 8-6x6-6; storage room, 12x12; height of ceiling, 9 ft.

Main Floor.

Reading room, 32x20; children's room, 13-6x10; board room, 20-6x12-2; stack room, 19-6x20-6; work room, 9-8x11; ladies' lavatory, 8x8; corridor, 24x12-6; height of ceiling, 13 ft.

Wood used for interior finish, oak.
Wood used for fittings, oak, quarter-cut, golden finish.
Materials used for stacks, steel and oak.
No provision has been made for increasing capacity of stack room.
Cost of building, exclusive of site, $10.934.
Value of site, $4,000.
Cost of furnishing, $1.566.
System of heating, steam.
Defects in heating, none.

Members of Library Board at time of Opening.

J. R. Brown, Chairman, Judge Morrison, Mayor Farrington, T. C. Tice, J. A. Dolan, B.A., W. H. Williamson, John Sharmon, Archie Sullivan, J. P. Blakely, Treas.

Official Staff.

J. R. Brown, Chairman of Board; J. H. Dolan, B.A., Chairman of Library Committee; J. B. Blakely, Treasurer; W. D. Massey, D.D.S., Sec.; Mrs. E. Harris, Librarian.

Free access is allowed to stack room.
No age limit.
Card catalogue.
Dewey Decimal clasification.

Uxbridge Free Public Library.

The first steps for the organization of a Mechanics' Institute and Library Association were taken at a public meeting held at the Temperance Hall, on Jan. 7th, 1859. Joseph Gould, M.P., was appointed Chairman. The constitution adopted at the meeting recited, "That the object shall be the diffusion of useful knowledge through the establishment of a reading room, a circulating library, public lectures, and such other means as may be determined by the executive."

The following officers were elected:—

Joseph Gould, M.P., President; Rev. William Cleland, 1st Vice-President; John Watson, M.D., 2nd Vice-President; J. P. Plank, Treasurer; H. D. Hetherington, Librarian; Joseph Dickey, Secretary.

Board of Directors.

Messrs. David Walker, Wm. Hamilton, Anson P. Button, James Galloway, Wm. Smith, Anthony Thompson, J. W. Brown.

Uxbridge Free Public Library.

Great difficulty was experienced in the early years in providing suitable accommodation and equipment, though judging from the steady growth of the library and the number of lectures given, very good work must have been done. The library was frequently changed from cellar to garret until 1887, when through the generosity of one of the most public spirited citizens of Uxbridge, the late Joseph Gould, Esq., provision was made for the building and equipment of the present handsome and up-to-date library, known as "The Joseph Gould Institute."

The structure is two and a half stories high, 27x56 feet, with walls 18 inches thick, built of white brick, with red brick trimmings and placed on a substantial cut stone foundation. It was completed in 1887, at a cost of $5,000, exclusive of the site, and was presented, with the very valuable clock in the tower, to the town of Uxbridge, on Dec. 8th, 1887.

The interior of the library is finished in clear, white pine, with hardwood stairs and fittings.

The Basement.

Gymnasium, 40x24; height of ceiling, 10 ft; furnace room, 12x12; coal room, 16x10; store room, 16x14.

Ground Floor.

Reading room, 18x24; height of ceiling, 12 ft.; hall, main entrance, 13x14; stack room, 18x24.

The stacks are eight feet in length and seven feet high; material, ash, varnished at ends. Wall cases extend around the whole room the same height as the stacks and are made of the same material. The room is large enough to carry double the number of stacks at present in use.

Second Floor.

This floor contains nine rooms and is fitted up for and occupied by the librarian.

System of Heating.

Hot air furnaces (fairly satisfactory).

Free access to stack room is not permitted.

No age limit.

Printed catalogues are used, but a change to the card system is probable in the near future.

In January, 1898, an effort was made to induce the town council to assume the management of the library and have it made free to the municipality. Dr. May, Supt. of Public Libraries, addressed a citizens' meeting in the Town Hall, advocating the advantages of the free library system. The Council decided to assume the responsibility and on Feb. 26th, 1898, the transfer was made. The result has been marked improvement and the good work of the library extended. The present circulation now averages 10,000 volumes per annum, a hightly creditable showing for a town the size of Uxbridge.

Shortly after securing the new library building the directors were fortunate in securing an ideal librarian, the late Mrs. S. D. Wills, who for eighteen years discharged the duties of the office with zeal, courtesy and tact, thus giving a highly efficient service.

The new library was opened to the public by the Hon. Geo. W. Ross, the Minister of Education. A banquet and entertainment was held at which appropriate addresses were delivered by Mr. Ross and other distinguished speakers.

Official Staff at Time of Opening.

James Walker, President; Dr. Joseph Bascom, Sec.-Treas.; William Russell, Librarian.

Board of Directors.

Messrs. I. J. Gould, M.P.P., T. W. Chapple, Rev. Cockburn, James Reid, Henry Killington, Rev. J. Davidson, W. B. Stewart, John Watt.

Bracebridge Public Library.

The Bracebridge library was organized about 25 years ago, and up to March, 1901, was a Mechanics' Institute. It was then taken over by the town and became a Free Library. In 1906, His Honor Judge Mahaffy, Chairman of the Board, applied to Mr. Carnegie, who very graciously set apart the sum of $10,000 for the erection of a new building. The town giving the usual guarantee and providing a suitable site. Building operations were commenced in September, 1906, but not completed until December, 1907.

Basement story is of stone, the upper story brick.

Interior finish: Woods used in finish, ash in both stories; the floors are all of No. 1 birch; walls and ceilings plastered.

Roofing, slate except over balcony, which is galvanized iron.

Size, main building 37½x48, and porch 8½x9½.

Basement ceiling, 8 feet 7 inches.

Stack room ceiling, highest point 16 feet.

Reading room, in centre 18½ and at the front 16 feet.

Basement has four rooms, viz., boiler, board, receiving and general reading room, lavatory.

Ground floor has three rooms, viz., reading room, stack room and vestibule.

Books stacks are of oak.

Furniture is of oak.

No provision has been made for enlarging stack room only by enlarging building.

Total cost of building, $7,200.00.

Value of site, $1,000.00.

Cost of heating plant (hot water), $900.00, no defects as yet.

Cost of furnishings, $1,000.00.

Free access to books permitted.

Age limit, 12 years.

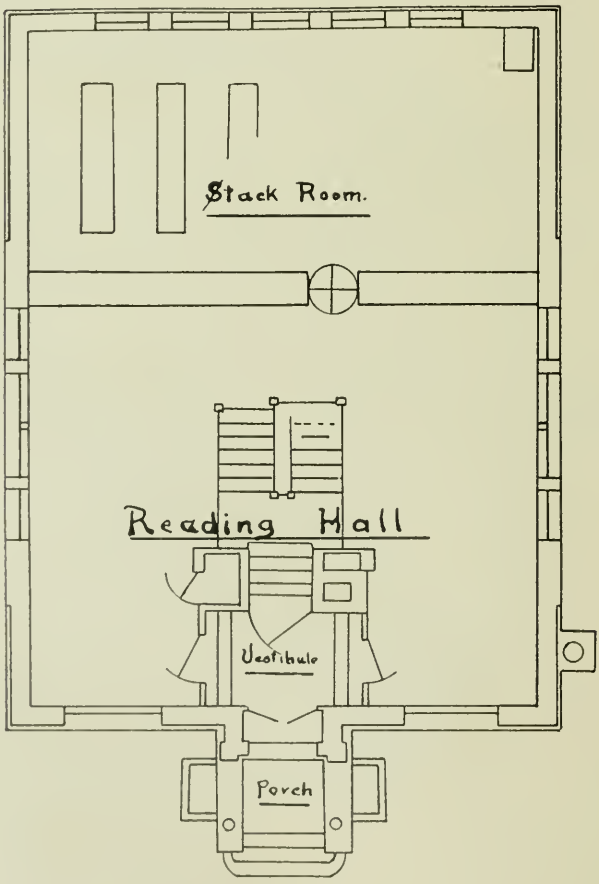
Printed cards and catalogue are used.

Members of the Board.

His Worship the Mayor, S. H. Armstrong, His Honor Judge Mahaffy, Chairman, James Whitten, H. J. Bird, Jr., J. M. Ballentine, F. P. Warne, Alfred Hunt, M. J. Dickie, Secretary-Treasurer.

Bracebridge Public Library.

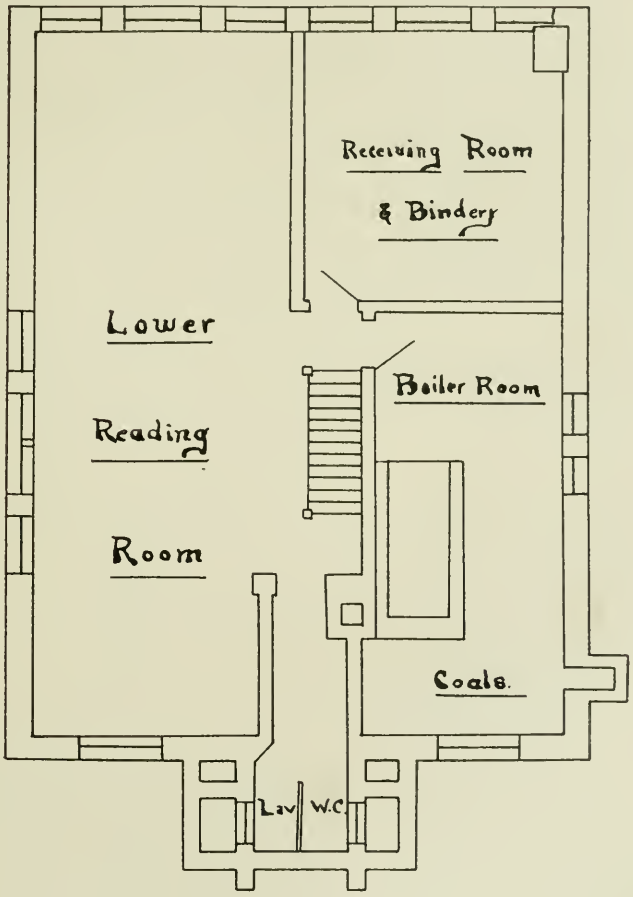
Bracebridge Public Library



Ground Plan

Bracebridge

Public Library



Basement Plan

Burlington Public Library.

The first reading room established in Burlington was established by the Y.M.C.A. After a time it was found impossible to continue the room for lack of funds. Arrangements were then made to form a Mechanics' Institute, with library and reading room. A building was rented and the new institution took over the magazines, furniture, etc., of the Y.M.C.A. and also the books of the Public School Library. In 1906, the Public Library Board felt that more commodious quarters should be provided, and a movement was started to erect a suitable building. At the same time a number of young men proposed to secure a room for recreation purposes. The forces were then united and arrangements were made to finance the erection of a building suitable for both purposes. Some progress had been made when Mr. John Waldie, a former resident of the village, volunteered to erect a building, provided the Council would furnish the site. The Council acquiesced and the result is the present handsome Public Library.

The building was completed and opened on Feb. 20th, 1907.

Materials used in construction: Basement, stone; front, cut stone; walls, brick; roof, felt and gravel.

Materials used in finishing interior: Floors, maple; woodwork, doors, etc., white pine with oil finish; walls, stogel plaster.

The exterior of building is pressed red brick, cut stone corners and arches; one story high with basement.

Size, 45x45 and about 31 feet in height.

Basement.

Gymnasium, 38x25; recreation room, 14x15; closet and hallway, 7x14; height of ceiling, 10 ft.

Ground Floor.

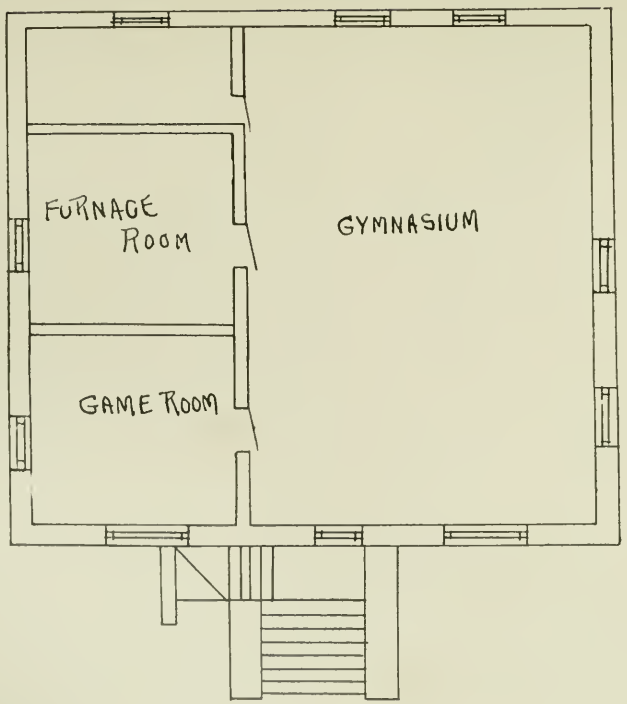
One room, which includes the stack room; height of ceiling, 12 ft.
Interior finish, white and Georgia pine.
Material used in stacks, pine.
Provision has been made for increasing capacity of stack room.
Cost of building, exclusive of site, $5,000.
Value of site, $1,000.
Cost of furnishings, $200.00.
System of heating, hot air.
Defects in heating, none.

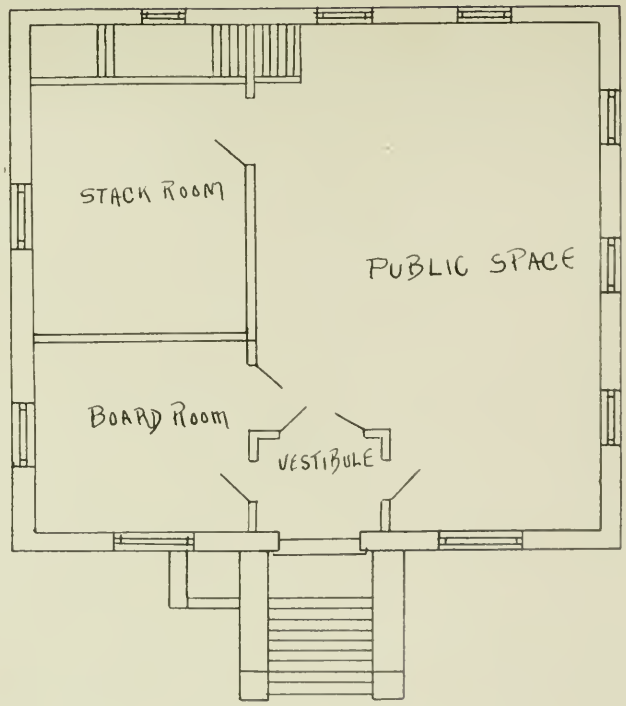
Members of Library Board when Library was Opened.

W. F. W. Fisher, President; Joseph Ackland, Treasurer; Messrs. F. W. Galloway, T. A. Le Patourel, H. T. Foster, H. R. Rowsome, W. R. Gilbert, V. H. Peart, A. T. Love.

Official Staff at Time of Opening.

F. Weber, Librarian.
Free access is not permitted to stack room.
No age limit.
Printed catalogue is used.
No defects have been discovered in the building.





BASEMENT. PLAN. FIRST FLOOR PLAN.

BURLINGTON PUBLIC LIBRARY.

Orangeville Public Library.

The advisability of asking Mr. Andrew Carnegie for a grant of $10,000, for a new public library building to be erected in the town of Orangeville, was first suggested to the Library Board some five or six years ago, by the late Mr. John McLaren, who had been for more than twenty years an active and valued member of the Board. From time to time the matter was discussed and in 1905 it was decided to take action. Mr. Carnegie was written to and agreed to make the grant on the usual conditions. The board then sent a deputation to wait on the Town Council with regard to securing a site, and to make the guarantee required by Mr. Carnegie. The result was that the Council provided a suitable site, but did nothing further. Early in 1906 members of the Board again asked the Council to take action. This time the Council consented to give the guarantee on condition that the erection of the building should be entrusted to a committee consisting of five members, three from the Council and two from the Library Board. This concession was agreed to by the Board and the following were appointed members of the committee:—Alexander Steele, Chairman; M. N. Armstrong, Secretary-Treasurer; Thomas Henderson, R. B. Henry, and R. A. McCracken, the first two from the Board and the last three from the Council. Before the Committee could have plans and specifications prepared and let the contract, much of the year had passed and only the foundation and part of the outside walls were built when work was stopped by the winter. In April, 1907, work was re-commenced and the building is now (January 1st. 1908) nearing completion. A further grant of $2,500, was secured from Mr. Carnegie in 1907, so that the whole cost of building, equipment, and work on the grounds is $12,500.

Architect: Beaumont Jarvis, Esq., Toronto.

Contractors: Messrs. Jerrett and Sons, Alliston, Ont.

Building: Basement and main floor.

Material used in construction: Brick, with Roman Stone pillars, etc. Material used in furnishing interior is Georgia Pine with plastered walls.

Basement: No. of rooms, 9; height of ceiling 12 feet.
- Boiler and coal room, 17 feet by 20 feet 9 inches.
- Dressing room: 10 feet 9 inches by 16 feet 6 inches.
- Auditorium: 24 feet by 45 feet.
- Vault: 8 feet by 13 feet.
- Council room: 17 feet by 20 feet 9 inches.
- Two Lavatories: each 6 feet 9 inches by 20 feet 9 inches.
- Two lumber rooms under stairs.

Ground floor: No. of rooms, 7; height of ceiling 16 feet.
- Men's reading room, 17 feet 8 inches, by 24 feet.
- Ladies' reading room, 17 feet 8 inches by 24 feet.
- Children's room, 8 feet 6 inches by 12 feet 6 inches.
- Stack room, 550 square feet.
- Hall (including delivery and newspaper rooms) 1,340 square feet.
- Board room, 7 feet by 21 feet.
- Librarian's room, 7 feet by 21 feet.

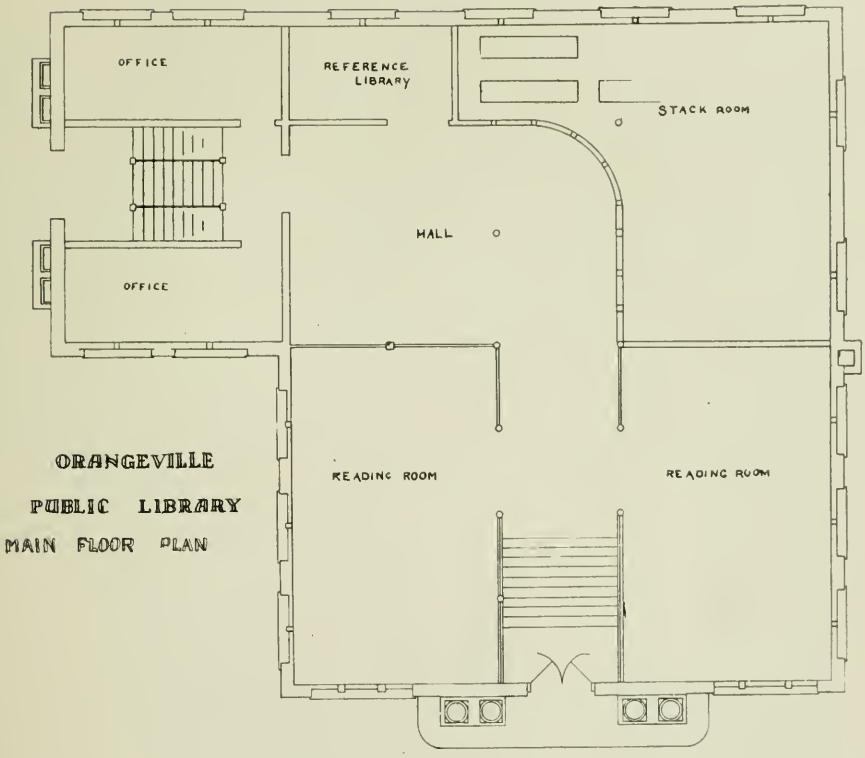
Wood used in interior finish: basement, Canadian Pine.

Wood used in interior finish: ground floor, Georgia Pine.

Wood used for fittings, ground floor, Georgia pine.

Material for book stacks is pine.

Capacity of stack room is sufficient for many years, and may be increased.



ORANGEVILLE

PUBLIC LIBRARY

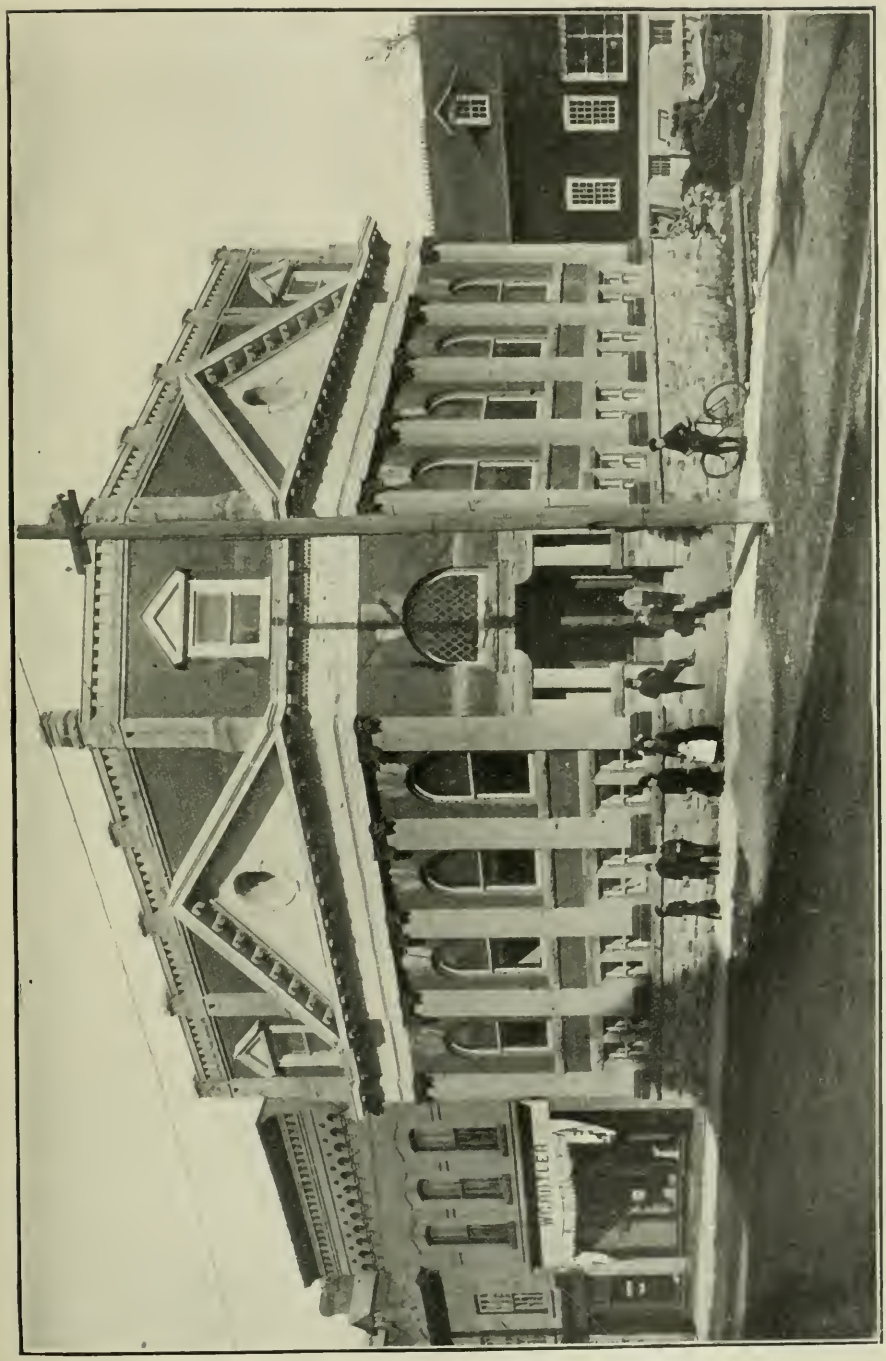
MAIN FLOOR PLAN

Cost of building, exclusive of site, $11,250 (estimated).
Cost of equipment and work on grounds, $1,250 (estimated).
Cost of site, $1,650.
System of heating is steam.

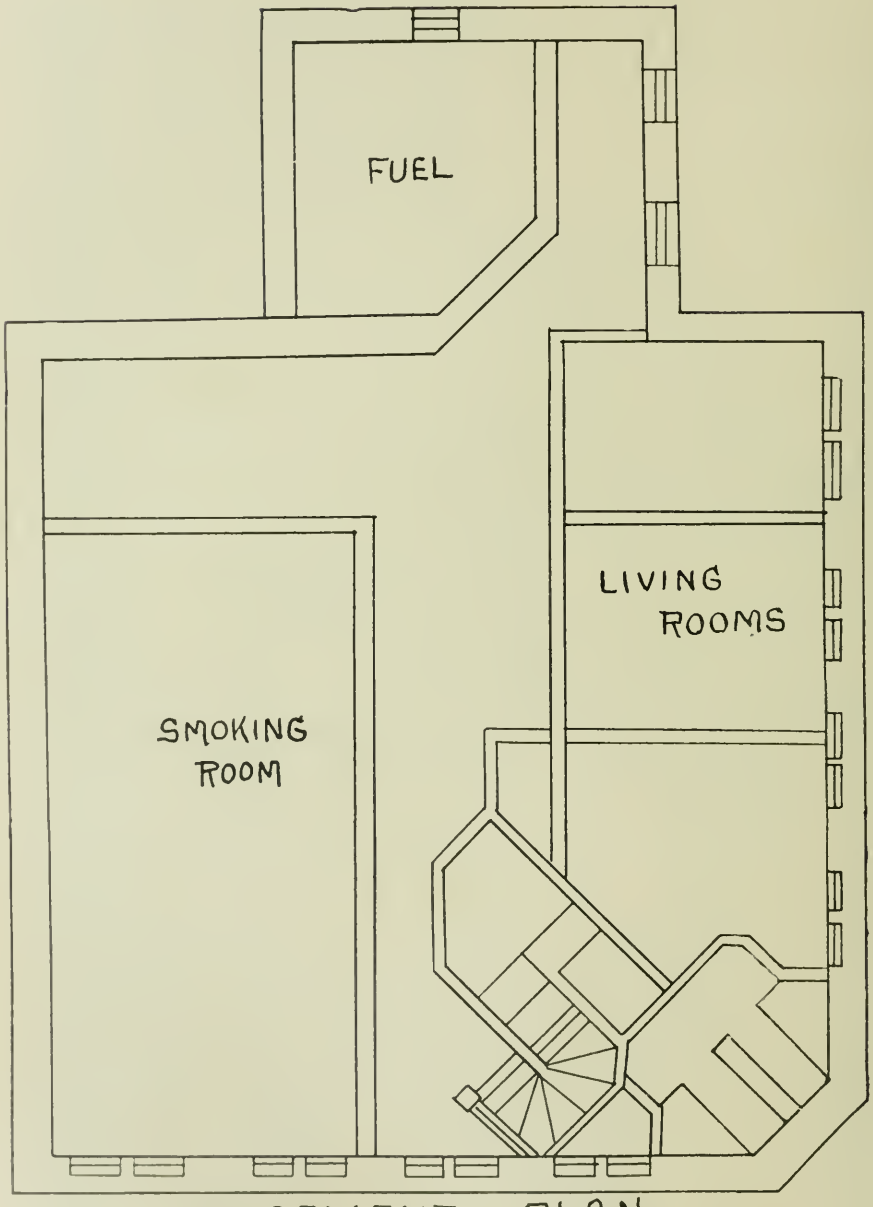
The regulations for the conducting of the library in the new building have not yet been made.

Juvenile Biographical Series.

It is proposed, during the year 1908, in conjunction with the Ontario Library Association, to begin the publication of a juvenile Biographical Series of Books, which every Canadian boy and girl should read. For years past United States publishers have flooded Canada with juvenile books, which teach the young history from the standpoint of Republican greatness. The supposed facts are, to a large extent historical fictions. The books contain much detail absolutely false and suggest military victories and campaigns not true. Such literature is pernicious and should be rigidly excluded from every Public Library. To supply the want, a Canadian Series is absolutely necessary. While based upon historical records and absolutely true the aim will be to catch and hold the interest of the young readers—to interweave dramatic action, anecdote and patriotism—to instruct and create a healthy pride in our own country and in British men and institutions.

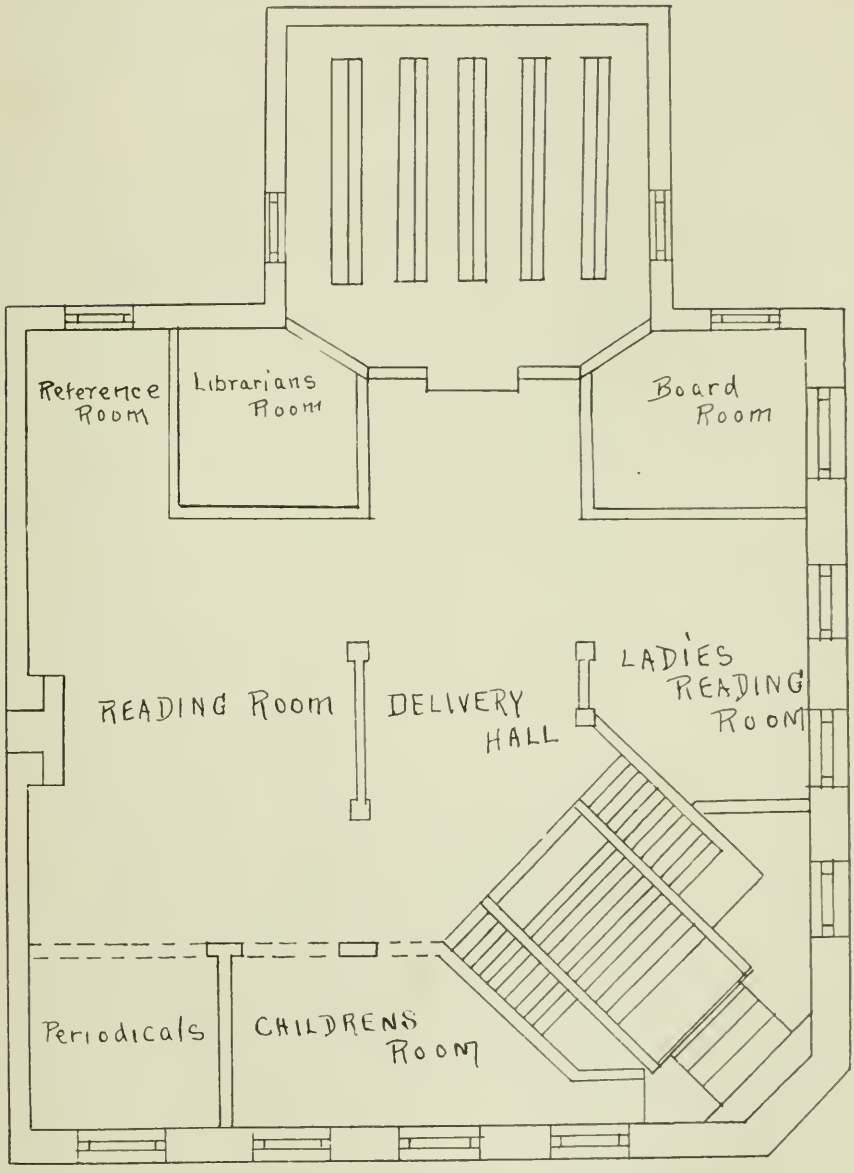


Perth Public Library

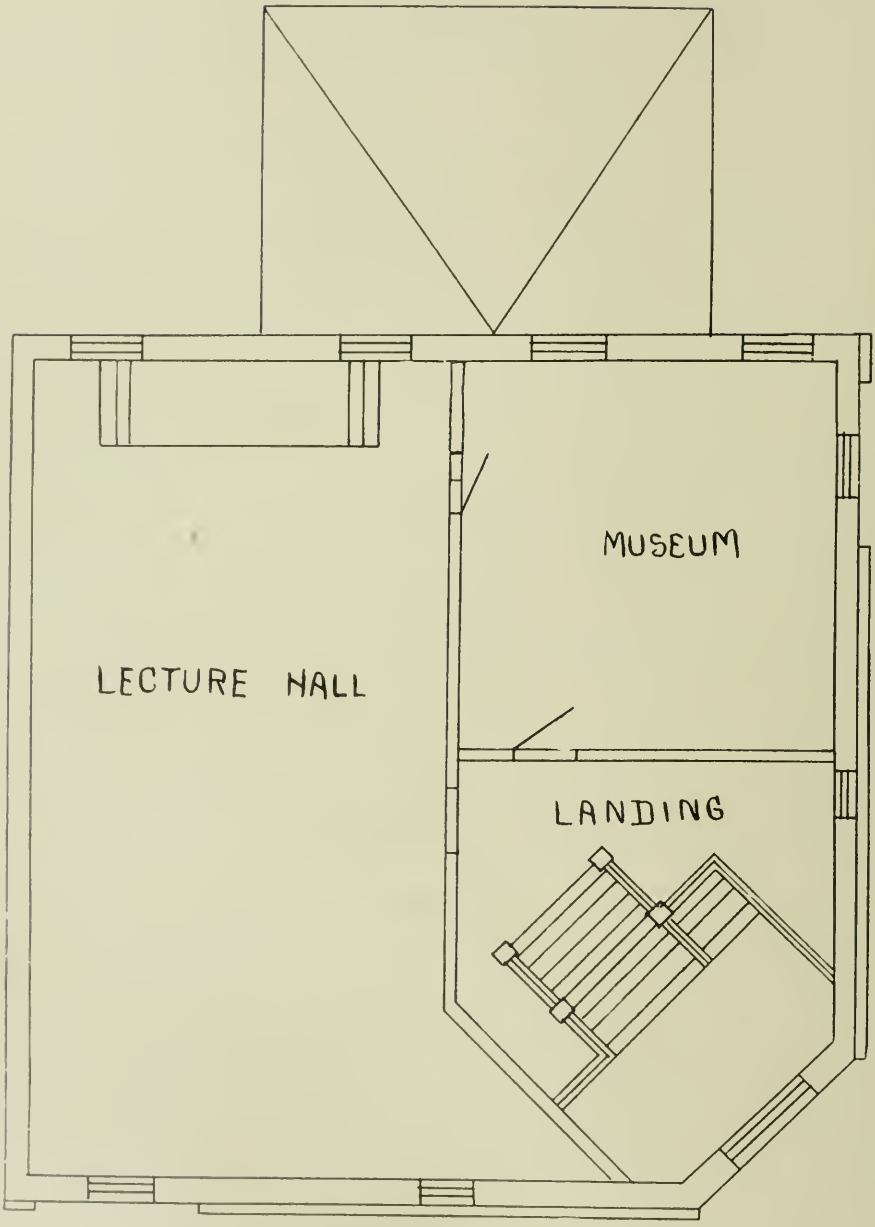


BASEMENT PLAN
PERTH PUBLIC LIBRARY

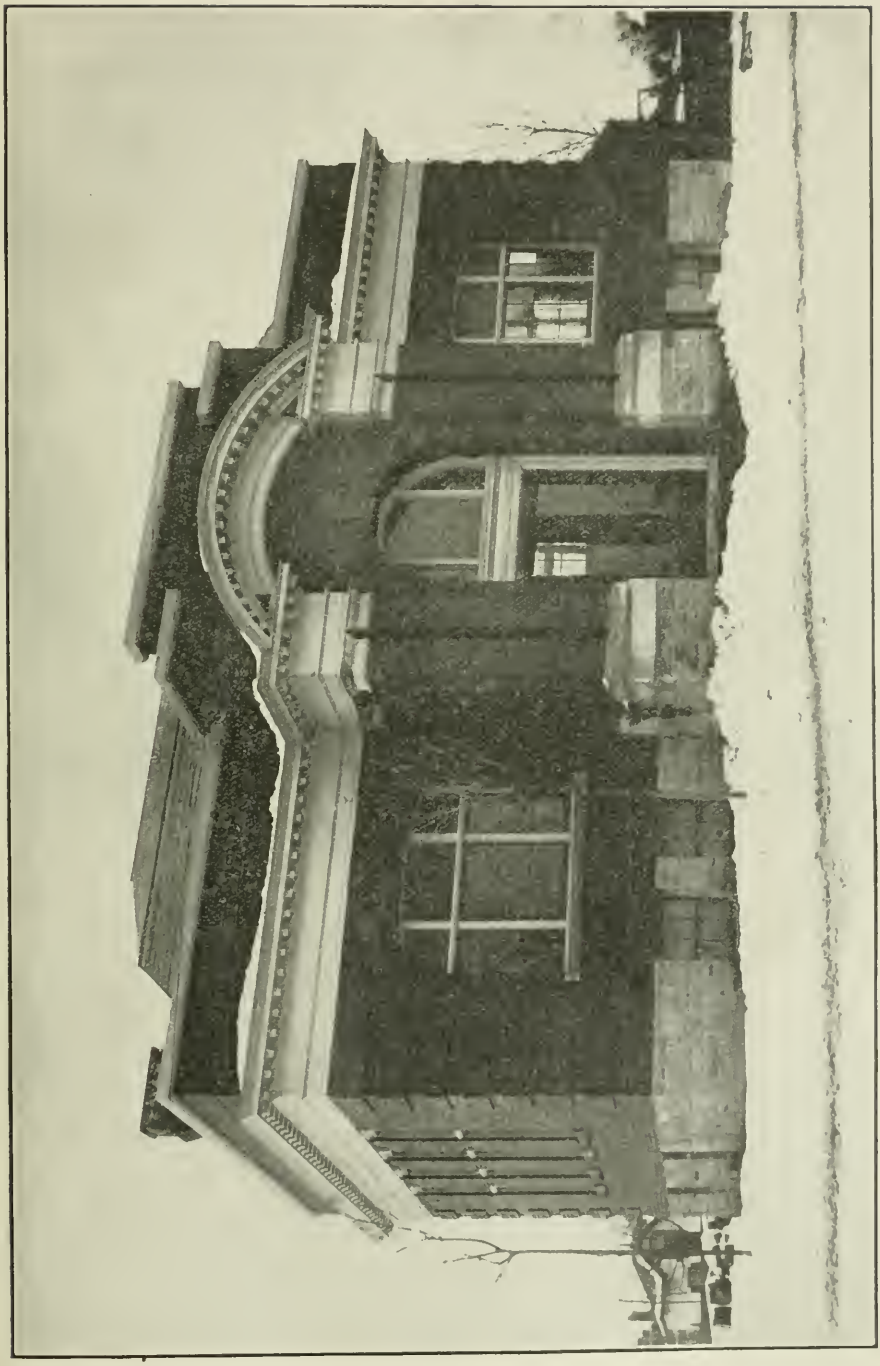
PERTH PUBLIC LIBRARY



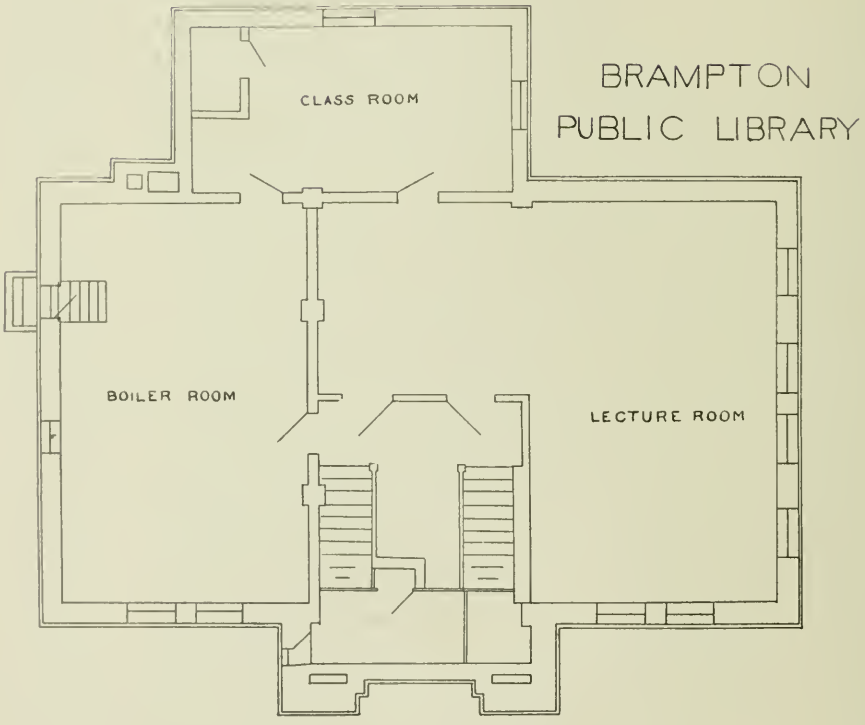
GROUND FLOOR PLAN



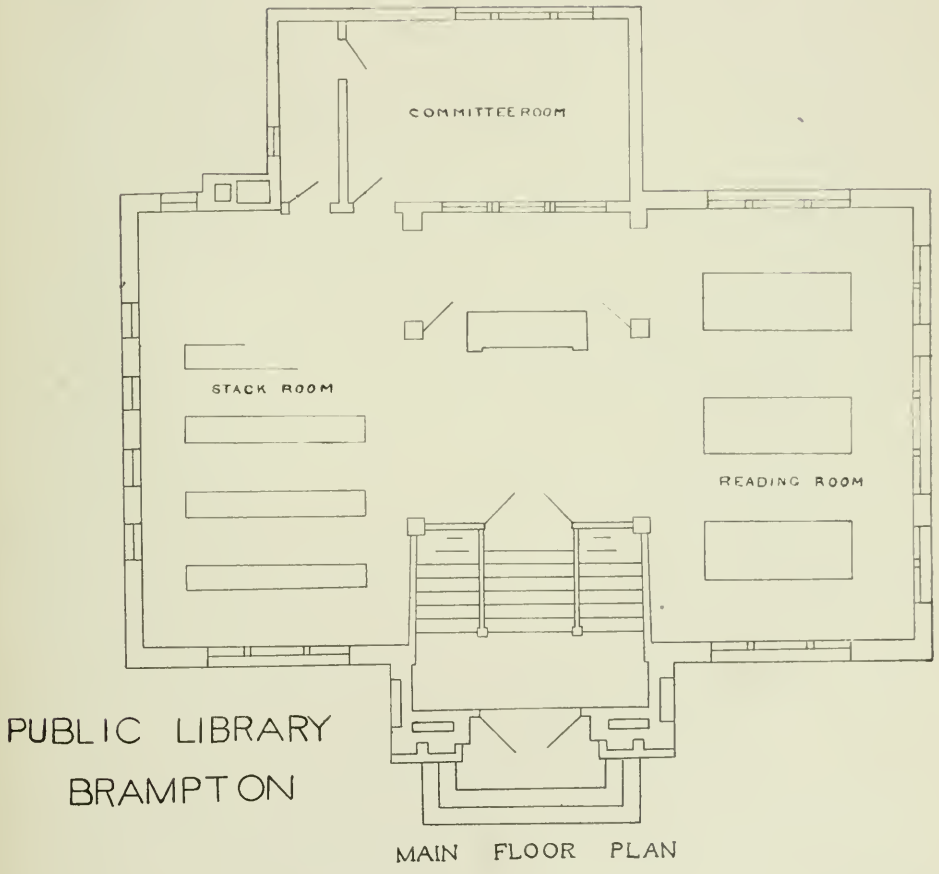
FIRST FLOOR PLAN
PERTH PUBLIC LIBRARY

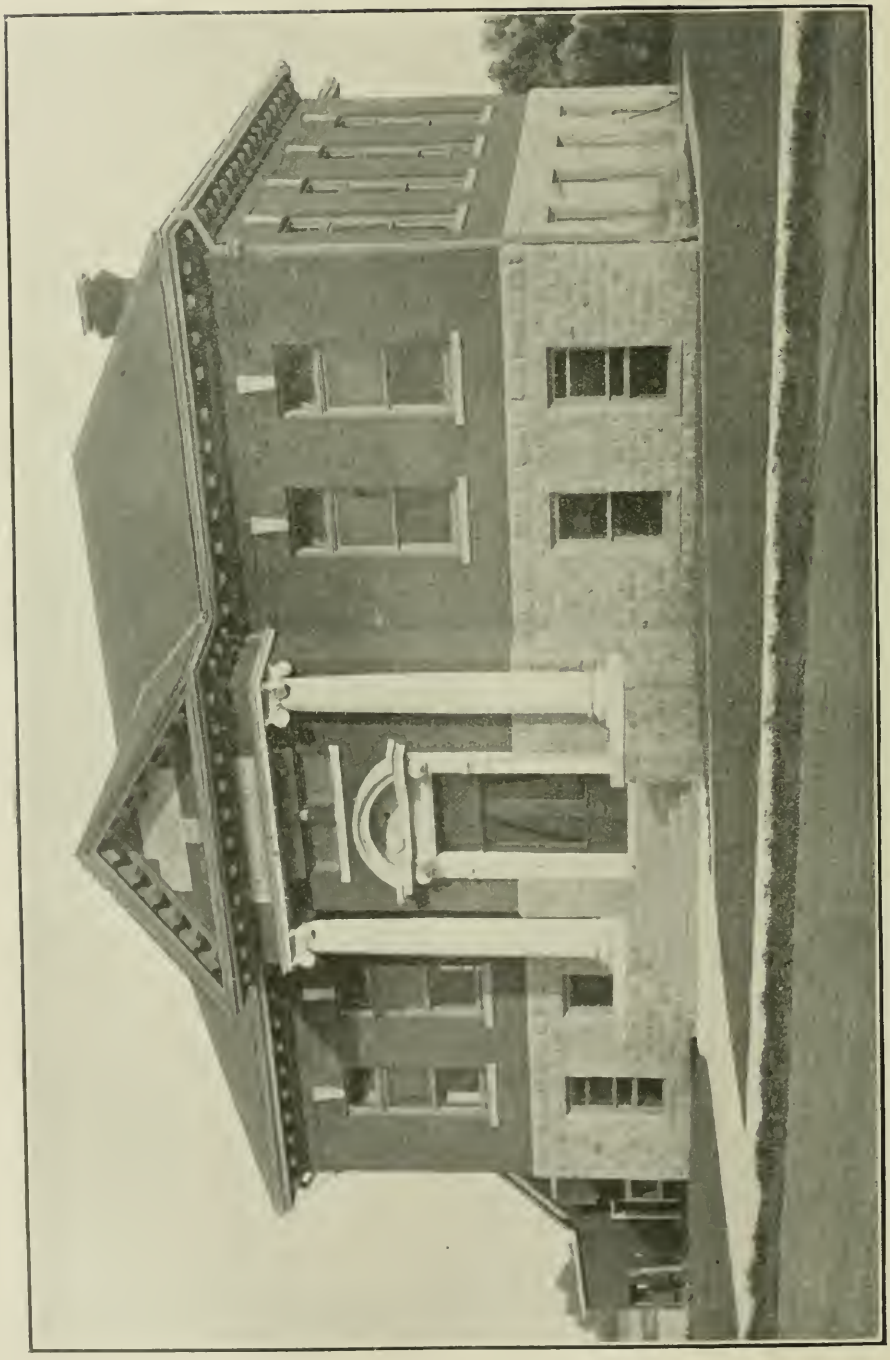


Brampton Public Library

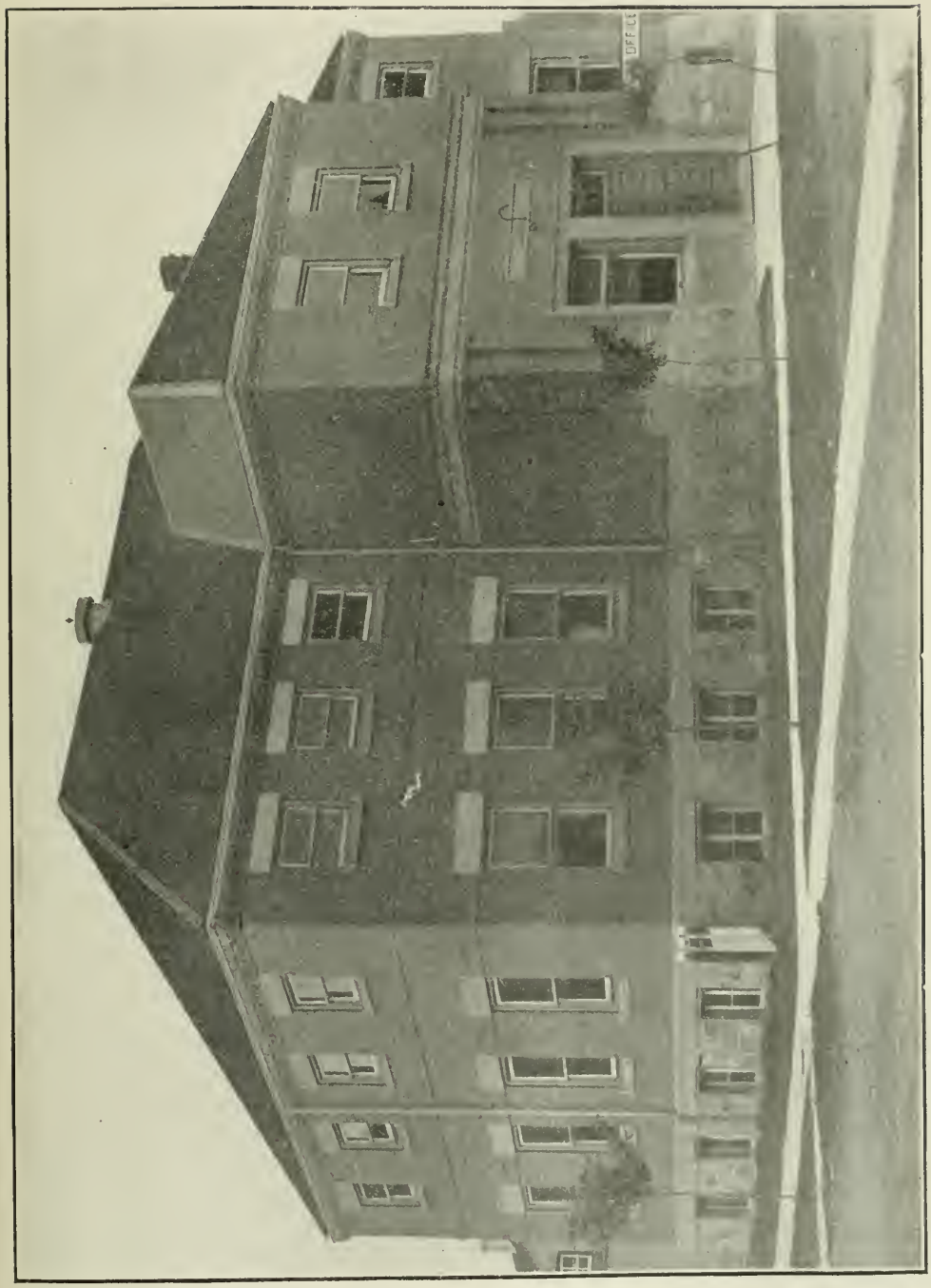


BASEMENT PLAN


COMMITTEE ROOM
STACK ROOM
READING ROOM
PUBLIC LIBRARY
BRAMPTON
MAIN FLOOR PLAN



Wallaceburg Public Library



Palmerston Public Library

APPENDIX I.—REPORT OF THE LIBRARIAN OF THE EDUCATION DEPARTMENT.

To The Hon. R. A. Pyne, M.D., LL.D., M.P.P., *Minister of Education for the Province of Ontario*:

Sir,—I have the honour to submit herewith the Report of the Library of the Education Department for the year 1907.

On reference to the following table it will be found that there is a falling off in the number of books loaned during the year, the figures being 7,208 in 1906 and 7,098 in 1907, a decrease of 110. It must not be assumed from this decrease that there is any material change in the number of persons using the library, as its patrons are rather more numerous than ever before in its history. Two factors account for the decrease:—(1) It has been deemed prudent to decline to loan any of the reference works, and (2) many more students use the books in the library making extracts therefrom than formerly. This is something I would like very much to encourage, as the same books can be used by several students during the day, whereas if borrowed for a day or two only one person at a time gets the benefit of it. A large reading-room is urgently needed.

Number of Books loaned, 1898-1907.

Books given out in the month of—	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907
January	608	484	526	518	542	587	673	646	714	787
February	928	868	948	1,124	959	1,036	970	848	877	831
March	1,393	1,158	1,454	1,563	1,084	1,558	978	777	1,042	704
April	882	848	766	997	1,187	899	854	497	578	691
May	969	895	911	867	832	901	738	723	853	739
June	677	518	540	576	510	591	482	317	319	456
July	265	256	231	317	336	168	220	296	341	176
August	233	329	224	176	233	152	259	260	203	124
September	410	489	432	411	538	476	378	446	401	388
October	1,043	1,018	1,312	1,058	958	761	776	661	616	805
November	1,024	1,034	1,229	1,014	1,158	687	900	962	776	1,045
December	464	549	547	516	535	600	480	475	485	352
Totals	8,896	8,446	9,120	9,137	8,872	8,396	7,708	6,908	7,208	7,098

Number and Subjects of the Books purchased in the years 1898 to 1907.

Year.	Volumes.	Subjects.
1898	533	
1899	315	
1900	275	Education.
1901	164	Science.
1902	304	Literature.
1903	218	Art.
1904	409	Text Books.
1905	486	Miscellaneous.
1906	548	
1907	641	

In purchasing books during the past year a special effort was made to secure, as far as possible, the best available works on the following subjects:—Pedagogy, Philosophy, Ethics, Literature and History, together with reference works. If any confirmation of the wisdom of the choice made were needed, it would be found in the fact that the new books have been in constant demand, notably those on Pedagogy, which proved to be of incalculable value to the students attending the summer schools for the training of the Separate School teachers this year.

The Number of Books Purchased in 1903-1907 was as follows. (A list, in detail, for 1907, will be found at the end of this Report.)

Subjects.	1903	1904	1905	1906	1907
Pedagogy	7	18	30	22	78
Science (Political Economy, Anthropology, etc.)	3	10	32	17	11
Philosophy, Ethics and Religion	8	17	13	18	37
Industrial and Domestic Science	6	24	66	30	21
Poetry	10	13	5	16	35
Fiction and Practical Life	19	79	37	198	42
Literature	35	92	70	11	29
Text-Books	27	37	84	70	60
Miscellaneous (History, Biography, Reference Works)	61	84	119	119	260
Natural History and Nature Study	27	20	25	28	39
Arts	15	15	5	19	29
Totals	218	409	486	548	641

As will be seen from the following table there were very few books donated to the library during 1907.

Number of Books donated to the Library 1900-1907.

	1900	1901	1902	1903	1904	1905	1906	1907
Text-Books	65	111	41	144	349	95	326	25
Miscellaneous	7	13	54	95	16	37	177	42
Totals	72	124	95	239	365	132	503	67

Newspapers and Magazines Received during the years 1902-1907.

	1902	1903	1904	1905	1906	1907
Number of daily and weekly newspapers received	88	89	109	126	90	87
Number of magazines and other periodicals received	100	111	94	98	102	101
Totals	188	200	203	224	192	188

The number of books bound in 1907 appears insignificant compared with those bound in 1906. The great difference is owing to our having had in 1906 a large number of books re-bound as well as binding several fyles of magazines, Education Reports and journals, which, up to that time, we had not been able to complete.

Books, Magazines, etc., bound during the years 1895-1907.

1895	1896	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907
141	98	99	90	94	37	83	71	4	81	45	217	58

Reports and other Documents Relating to Education, etc., Received During 1907.

From Great Britain and Ireland.

Reports of the Education Committee of the London County Council:—

(1) Submitting the Report of the Medical Officer (Education), for the year ending 31st March, 1906.

(2) Submitting the Report of the Medical Officer (Education), for the year ending 31st March, 1907.

(3) Submitting the Report of the Executive Officer dealing with Higher Education, for the year ending 31st March, 1906.

(4) Submitting the Report of the Executive Officer dealing with Industrial and Reformatory Schools, for the year ending 31st March, 1906.

(5) Submitting the Report of the Executive Officer dealing with Schools for Blind, Deaf and Mentally and Physically Defective Children, for the year ending 31st March, 1907.

Report of the Joint Committee of the London County Council on Underfed Children for the season 1906-1907.

London County Council, Special School for Blind, Deaf and Defective Children.

Science and Art Department of the Committee of Council on Education, South Kensington, London, being Directories with regulations for establishing and conducting Science Schools and Art Classes for the years 1882 to 1906.

Code of Regulations with Appendices by the Rt. Hon. the Lords of the Privy Council, London, on Education, for the years 1880 to 1906.

Code of Regulations for Evening Schools and Continuation Classes, London, for the years 1892 to 1908.

Regulations for Secondary Day Schools, London, for the years 1902 to 1907.

Regulations for the Instruction and Training of Pupil Teachers and Students in Training Colleges, London, for the years 1903 to 1907.

Regulations for the Training of Teachers and for the Examination of Students in Training Colleges, London, for the years 1904 to 1907.

Revised Instructions issued to Her Majesty's Inspectors, and applicable to the codes of the years 1895 to 1902.

Regulations as to Cookery Diplomas issued by the Board of Education, London, for the following years, 1902, 1904, 1905-6 and 1906.

Regulations for the Preliminary Education of Elementary School Teachers in Wales, 1907.

Code of Regulations for Public Elementary Schools in Wales, 1907.

Scotland Education Department:—Memorandum on the Teaching of Primary Arithmetic in Schools, 1907.

Report of the Committee of Council on Education in Scotland, with Appendix, 1906-1907.

Regulations as to Grants to Secondary Schools, Scotland, 1907.

Regulations for the Preliminary Education, Training and Certification of Teachers for various grades of Schools, Scotland, 1906-7.

Code of Regulations with Appendices by the Rt. Hon. the Lords of the Privy Council on Education in Scotland, for the years 1881 to 1907.

Intermediate Education Board, Ireland, Rules for and Programme of Examinations for 1908.

Report of the Examiners of the Intermediate Education Board for Ireland, 1907.

Report of the Intermediate Education Board for Ireland, 1904.

Intermediate Examination Board for Ireland—Examinations, 1907, and Pass Lists for Boys and Girls.

The Seventy-third Report of the Commissioners of National Education, Ireland, school year 1906-1907.

Appendix to Seventy-third Report of the Commissioners of National Education, Ireland, 1906-1907.

Appendix to Rules and Regulations of the Commissioners of National Education, Ireland, for the years 1879, 1882, 1884, 1885, 1887, 1890, 1898, 1902, 1903, 1905, 1906-1907.

Rules and Regulations of the Commissioners of National Education, Ireland, 1907-1908.

Technical Education in the City of Belfast, Ireland, by F. C. Faith.

Technical Instruction in Ballymoney, Ireland, by James Pettigrew.

Department of Agriculture and Technical Instruction, Ireland—extracts from programme for Technical Schools, and Science and Art Schools and Classes for 1906-1907. Inspection of Teachers in Domestic Economy, Drawing, Experimental Science and Manual Instruction, and programme for the same subjects for 1905-1906.

Proceedings of the Royal Colonial Institute, London, 1906-1907.

University of London Calendar, for the year 1907-1908.

From the British Possessions.

Secondary Education, New Zealand, 1906, Manual and Technical Instruction, 1906; Physical Drill, 1906; Training of Teachers, 1906; Industrial Schools, 1906.

Education Gazette, Victoria, (issued monthly.)

Report of the Minister of Public Instruction, Victoria, 1905-6.

Report, with Appendices, of the Minister of Education, New South Wales, 1905.

Thirty-first Report of the Secretary for Public Instruction, Queensland, 1906.

Report of the Education Department, Western Australia, 1906.

Report of the Board of Governors of the Public Library, Museum and Art Gallery of South Australia, 1905-6.

Report of the Superintendent of Education, Cape of Good Hope, for the year ending 30th Sept., 1906.

Report of the Inspector of Schools, British Guiana, 1906-7.

Annual Report of the Inspector of Schools on Elementary Education. Trinidad, 1906-7.

From the Dominion of Canada.

Annual Report of the Chief Superintendent of the Schools of New Brunswick for 1905-6.

Manual of the School Law of New Brunswick, 1906.

Annual Report of the Superintendent of Education of the Public Schools of Nova Scotia for the year ending July 31st, 1906.

Manual of School Laws for Nova Scotia, 1901.

Report of the Superintendent of Public Instruction of Prince Edward Island, 1905-6.

The Public Schools Act, 1877, and amendments for Prince Edward Island, 1904.

Annual Report of the Schools of Prince Edward Island for nine months, ending 30th September, 1906.

Report of the Superintendent of Public Instruction of Quebec for 1905-6.

The School Law of the Province of Quebec, by G. W. Parmalee, 1899.

Report of the Department of Education, Manitoba, for 1905, with Examination Papers for 1905-6.

The Public Schools Act, 1902, with amendments of 1903-4-5-6 and 7, with Act respecting Department of Education, Manitoba, 1907.

Report of the Department of Education, Manitoba, 1906, with Examination Papers, 1906.

Report of the Proceedings of the first Provincial School Board's Convention for Alberta, Edmonton, 1907.

Office Consolidation of School Ordinance, School Assessment and School Grants Ordinance, with amendments, including amendments of 1904, Edmonton, Alberta, 1907.

Regulations of the Department of Education, Alberta, Sept., 1906

Course of Studies and Annual Examinations for Standard 5. Approved July, 1906, Alberta.

Programme of Studies for Standards 1 to 5, Certificates and Diplomas, Courses of Study Standards 6, 7 and 8 and Normal Schools, approved July, 1905, Alberta.

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Journals of the Senate of Canada, Ottawa, 1906.

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Sessional Papers of the Legislative Assembly, Ontario, 1906 and 1907.

Statutes of Ontario, 1907.

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From the United States.

Report of the National Educational Association, 1907, also Topical Index from 1871 to 1906.

Report of the Commissioner of Education, Washington, 1904.

Annual Report of the State Board of Education, and Sixty-first Annual Report of the Commissioner of Public Schools, Rhode Island, 1905.

Reports of the Board of Education, State of Connecticut, 1903, 4 and 5.

Report of the Eastern Art Teachers and Manual Training Associations, New York, 1906.

Annual Reports of the Western Drawing and Manual Training Associations for the years 1902 to 1906, Chicago. Also the Report of the Committee on Handicraft in the Public Schools.

Annual Report of the Board of Regents of the Smithsonian Institute, June 30, 1905.

Smithsonian Report of the United States National Museum, 1889 and 1904.

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Report of the Librarian of Congress and the Superintendent of Library Grounds and Buildings, Washington, 1906.

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Eighth Report of the Michigan Academy of Science and Art, Annual Meeting at Ann Arbor, March, 1906.

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Herbart y la Educación por la Serie "Los Grandes Educadores" por Gabriel Compayré. Buenos Aires, 1906.

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Report of the Superintendent of Public Instruction to the Governor of Hawaii from Dec. 31st, 1904 to Dec. 31st, 1906.

Our library is fast growing into popularity as a reference library, as each year we are able to record a larger number of visitors.

Visitors Consulting Reference Books:

January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
611	729	691	848	833	517	579	768	1,019	1,056	1,052	356	9,059

Visitors taking out Books:

January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
421	465	364	384	390	210	218	106	59	227	566	634	4,044

Allow me to draw your attention to the fact that it is becoming more and more difficult each year to provide room for the books that must necessarily be added to the shelves if we are to keep abreast of the times, and fulfill the requirements of an Educational Library.

Unless it is within the range of possibilities that a separate building may be erected for the library on the east side of the square, I would respectfully suggest the removal of the present antiquated and totally unsuitable shelving to be replaced by something more modern. A gallery running around both rooms broad enough to carry shelves 6 feet high by 12 or 14 feet wide would relieve considerably the present overcrowded condition of the library which is not only inconvenient, but positively confusing, and a great drawback to efficient work.

Ever since your advent to the Education Department, as its executive head, you have given every encouragement to my desire to place the library in a position to afford all possible aid to the teaching profession whose interest you have so much at heart, and as a consequence I am looking hopefully forward to having the improvement suggested carried out at the earliest convenient moment. The usefulness of the library will be much impaired if something is not soon done.

In concluding my report I beg to say that Dr. Alexander Anderson, Superintendent of Education for Prince Edward Island and Dr. A. H. Mackay, Superintendent of Education for Nova Scotia, have placed the Education department and library under great obligations for their exceptional kindness in furnishing the library with copies of the early School Reports of their respective provinces. We received from Dr. Anderson the reports from 1841 to 1868, except for 1842, 1850 and 1862 which are unobtainable, and from Dr. MacKay the reports for 1852, 1853, 1854, 1855, 1857, 1858, 1859, 1860 and 1862.

We are also much indebted to Dr. J. R. Inch, Chief Supt. of Education for New Brunswick, for a copy of the School Report for 1854, which we needed to complete our fyle.

Respectfully submitted,

HENRY R. ALLEY,
Librarian.

Toronto, December, 1907.

LIST OF BOOKS PURCHASED DURING 1907, WITH NAMES OF AUTHORS.

Pedagogy.

Normal School Education and Efficiency in Teaching, by J. L. Meriam.

School Funds and their Apportionment, by E. P. Cubberley.

The Rise of Local Supervision in Massachusetts, by H. Suzzallo.

The Educational Theories of Herbart and Froebel, by J. A. MacVannel.

City School Expenditure, by G. D. Strayer.

Some Fiscal Aspects of Public Education in American Cities, by E. C. Elliott.

The Public Primary School System of France, by F. E. Farrington.

The Educational Significance of Sixteenth Century Arithmetic, by L. L. Jackson.

The Making of a Teacher, by Martin A. Brumbaugh.

Cyclopedia of Education, by Alfred E. Fletcher.

Outlines of Psychology, by Wilhelm Wundt.
Psychology of the Moral Self, by B. Bosanquet.
The Psychological Principles of Education, by H. H. Horne.
Child Life in Our Schools, by Mabel A. Brown.
The Educational Ideal, by J. P. Munroe.
A Course in Experimental Psychology, by E. C. Sandford.
The Seven Liberal Arts, by Paul Abelson.
Psychologic Foundations of Education, by W. T. Harris.
The Education of the Greek people, by Thomas Davidson.
Studies in Education, devoted to Child Study and History of Education, by Earl Barnes. 2 vols.
The Evolution of the Massachusetts Public School, by G. H. Martin.
Brain and Personality, by W. H. Thompson.
Sex and Society, Studies in the Social Psychology of Sex, by W. J. Thomas.
Principles of Secondary Education, by Charles DeGarmo.
Bacon, The Advancement of Learning, by W. A. Wright.
The Classics and Modern Training, by S. G. Ashmore.
The Public Schools from Within, Essays, by Schoolmasters.
Education and National Progress, by Sir Norman Lockyer.
The Teaching of Mathematics in the Elementary and the Secondary Schools, by J. W. A. Young.
Paul Platter and the Educational Renaissance of the 16th Century, by Paul Munroe.
An Introduction to Psychology, by Mary W. Calkins.
Studies in the History of Educational Opinions from the Renaissance, by S. S. Laurie.
The Romanes Lecture, 1899, Humanism in Education, by R. C. Jebb.
The Theory of Teaching and Elementary Psychology, by A. Saulsbury.
Educational Psychology, by E. L. Thorndike.
Monographs on Education in the United States, by Nicholas Murray Butler.
Port Royal Education, by Felix Cadet.
Analytical Psychology, by Lightner Whitmer.
Lives of Baldwin, Lafontaine and Hincks, by S. Leacock.
A School Course of Mathematics, by David Mair.
School Training, by R. E. Hughes.
Principles and Method of Teaching, by James Welton.
German Lessons on the Gouin Method, by F. Theonoin.
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The Teaching of Modern Languages, by Leopold Bahlsen.
Mottoes and Commentaries of Froebel's Mother Play, by Susan E. Blow.
Talks to Teachers on Psychology, by W. James.
Growth and Education, by John M. Tyler.
The School and its Life, by Charles B. Gilbert.
Studies and Observations in the School-Room, by Henry E. Kratz.
Report of the Committee of Ten on Secondary School Studies.
The Theory of Sets of Points, by W. H. and Grace C. Young.
Administration and Educational Work of American Juvenile Reform Schools, by D. S. Snedden.
The Concept of Equality in the Writings of Rosseau, Bentham and Kant, by A. T. Williams.
Herbart and Frœbel, an attempt at Synthesis, by P. R. Cole.

Formal Discipline, by C. J. C. Bennett.
The Constructive Interests of Children, by E. B. Kent.
The History and Science of Education, by W. J. Sharp.
Among Country Schools, by O. J. Kern.
Youth, its Education, Regimen and Hygiene, by G. Stanley Hall.
The Educative Progress, by W. C. Bayley.
Principles of Physiological Psychology, by Wilhelm Wundt.
Genetic Psychology for Teachers, by C. H. Judd.
Later Infancy of the Child, by Gabriel Compayre.
Frœbel-Education by Development, by Josephine Jarvis.
Aspects of Child Life and Education, by G. Stanley Hall.
Syllabus of Lectures on the History of Education, by E. P. Cubberley.
The Meaning of Education, by F. H. Hazard.
Studies in Education during the age of the Renaissance, by W. H. Woodward.
The Children, some Educational Problems, by Alexander Darroch.
Aristotle on Education, by John Burnet.
The Schools of Hellas, by Kenneth J. Freeman.
Education by Plays and Games, by George E. Johnson.
Psychology, General Introduction, by Charles H. Judd.
Herbart, and Education by Instruction, by Gabriel Compayre.
Outlines of Psychology, by Oswald Kulpe.
Luther on Education, by F. V. N. Painter.

Science, Political Economy, Anthropology, etc.

The Principles of Biology, by Herbert Spencer.
The Human Mechanism, its Physiology and Hygiene, and the Sanitations of its surroundings, by Theodore Hough.
The Health of the School Child, by W. F. Mackenzie.
The Planning and Fitting up of Chemical Laboratories, by T. H. Russell.
Pagan Races of the Malay Peninsular, by W. W. Skeats, 2 vols.
The Native Tribes of South-East Australia, by A. W. Howitt.
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Labor and Capital, by Goldwin Smith, LL.D.

Philosophy, Ethics and Religion.

The Orbit of Life, by Wm. T. Herridge.
The Bishops of the Church of England in Canada and Newfoundland, by Rev. Charles A. Mockridge.
Animism—The Seed of Religion, by Edward Clodd.
Religion of Ancient China, by H. A. Giles.
Religion of Ancient Greece, by Jane E. Harrison.
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Handbook of the Gospel of Saint John, by Rev. W. C. E. Newbolt.
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Little Journeys to the Homes of Famous Missionaries, by E. Hubbard.

The Gate of Death. A Diary.
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Studies in Humanism, by F. C. S. Schiller.
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A History of Modern Philosophy, by Dr. H. Hoffding, 2 vols.
The Philosophical Theory of the State, by Bernard Bosanquet.
History of Ancient Philosophy, by Dr. W. Windelband.
An Examination of Sir William Hamilton's Philosophy, by J. Stuart Mill.
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Kant's Critical Philosophy for English Readers, by J. P. Mahaffy.
Philosophical Remains of Richard Lewis Nettleship, by A. C. Bradley.
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Chapters from Aristotle's Ethics, by J. H. Muirhead.
The Field of Ethics, by G. H. Palmer.
The Ethics of Naturalism, by W. R. Sorley.
The Elements of Ethics, by J. H. Muirhead.

Industrial Education and Domestic Science.

Modelling—A Guide for Teachers and Students, by E. Lanteri.
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Woodwork for Standards—5 to 7—by J. C. Pearson.
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Teachers' Handbook of Manual Training, Metal Work, by J. S. Miller.
The Craftsman, by Gustav Stickley, 7 vols.
Industrial Education, by G. G. Love.
The Cause and Extent of the Recent Industrial Progress in Germany, by E. D. Howard.
Year Book of the Council of Supervisors of the Manual Training Arts, Providence, R. I., 1902 and 1906.
Proceedings of the American Manual Training Association, 1897 to 1905.
Report of the Commission on Industrial and Technical Education of Columbia University.
Development of the Locomotive Engine, by Angus Sinclair.
A Study in Health Science, by M. J. Keene.
Dainty Meals for Small Families, by Marguerite Ninet.

Poetry.

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Literature.

The Cabinet of Irish Literature, by Chas. A. Paul.
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Text Books.

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Miscellaneous, History, Biography, Reference Books.

The Story of the Nations, 16 vols.

The Nineteenth Century Series, 26 vols., Chronological Index and Appendix, by Justin McCarthy.

West Africa before Europe, by E. W. Blyden.

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English America, by Samuel P. Day. 2 vols.

The Canadian War of 1812, by C. P. Lucas.

Review of Historical Publications in Canada, by G. M. Wrong.

Canada, its Defences, Conditions and Resources, by W. H. Russell.

The Seigniorial System in Canada, by W. B. Munro.

A Short History of the Canadian People, by Rev. G. Bryce.

History of the Northwest Rebellion of 1885, by C. P. Mulvaney.

Eight Series of Historical Documents, 1906. Blockade of Quebec, 1775-1776, by the American Revolutionists, Quebec, by F. C. Wurtele, 1906.

The Canadas as They Now Are, by a late Resident.

Greater Canada, the Past, Present and Future of the Canadian Northwest, by E. B. Osborne.

A History of Ontario, by Alexander Fraser. 2 vols.

The Canadian Law List, by H. Cartwright.

Canadian Constitutional Documents, by Wm. Houston.

British and American Diplomacy affecting Canada, 1782-1899, by Thomas Hodgins.

Ferguson's Tour in Canada and a Portion of the United States in 18—.

Atlas of Canada, by James White.

Life of Lord Dorchester, by A. G. Bradley.

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Captain James Cook, the Circumnavigator, by Arthur Kitson.

Life of George Macdonald, by Joseph Johnson.
Life of Sir Joshua Fitch, by A. L. Lelley..
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Life of Christopher Columbus, by John B. Thacker. 6 vols.
Homer and his Age, by Andrew Lang.
An Introduction to the English Historians, by Chas. A. Beard.
Commemorative Biographical Record of Lambton County, Ontario.
The Schoolmasters' Year Book and Directory. A Reference Book of Secondary Education in England and Wales, for years 1903 to 1906. 4 vols.
Stoke's Encyclopedia of Familiar Quotations, by Elford Eveleigh Treffey.
Who's Who (English), by A. and C. Black.
CanadianYear Book, 1906, by A. Hewett.
Scope and Interpretations of the Civil Code of Lower Canada, by F. P. Walton.
The Records of the Virginia Company of London, England, by Susan M. Kingsbury.
The A.L.A. Portrait Index. An Index to Portraits contained in Printed Books and Periodicals, by Wm. C. Lane.
Whittaker's Almanac for 1907.
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Canadian Annual Review for 1906, by J. Castell Hopkins.
Lippincott's New Gazetteer of the World, 1906.
The Statesman's Year Book, 1907.
The World's Commercial Products, by W. G. Freeman.
The Empire and the Century, a series of Essays on Imperial Problems, by C. S. Goldman.
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The Brant Family, by Mrs. John R. Holden.
Events in Indian History in 1841.

Biography and History of the Indians of North America, by S. G. Drake.

Report on the Dominion Government Expedition to the Hudson Bay and the Arctic Islands, by A. P. Low.

Travels through the United States of North America, the Country of the Iroquois in 1795-1797, with an authentic account of Lower Canada, by Duke de la Rochefoucardt Leancourt.

Smithsonian Institute and Museums Report. 34 vols.

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Universal Anthology, Richard Garnett. 33 vols.

The Mythology of the British Isles, by Charles Squire.

Empire Club Speeches, edited by Prof. Wm. Clarke. 4 vols.

The Making of Citizens, by R. E. Hughes.

The Race Question in Canada by Andre Siegfried.

Natural History and Nature Study.

Principles of Plant Culture, by E. S. Goff.

Plant Physiology and Ecology, by F. E. Clements.

Methods in Plant Histology, by C. J. Chamberlain.

Ferns, by Campbell E. Waters.

How Ferns Grow, by Margaret Glosson.

How to know the Wild Flowers, by Mrs. W. S. Dana.

Farm Weeds of Canada, by G. H. Clark.

The Tree Book, by Julia E. Rogers.

How to Teach about Trees, by F. O. Payne.

Handbook of the Trees of the Northern States and Canada, by Romeyn B. Hough.

Our Northern Shrubs and How to Identify Them, by Harriet L. Keeler.

The Fruits of Ontario, 1906.

How to Teach Nature Study, by A. M. Kellogg.

Buffin's Animated Nature. Illustrated. 2 vols.

In Nature's Storyland, by Edith Hirons.

Mystic Voices, by S. L. Mershon.

Talk about Common Things, by B. MacLeod.

The Bird, its Form and Functions, by C. W. Beebe.

How to teach Aquatic Life; Bugs, Beetles and Locusts; Birds, Butterflies and Bees and Minerals. 5 volumes, by Frank O. Payne.

Tenants of the Trees, by C. Hawkes.

Wasps, Social and Solitary, by G. W. and E. G. Peckham.

The Natural History of Animals, by J. R. Ainsworth Davis. 4 vols.

Studies in the Art Anatomy of Animals, by E. Seton-Thompson.

The Living Animals of the World, by Dodd, Mead & Co.

A History of the Animal World, by G. S. Goodspeed.

The Study of Animal Life, by J. Arthur Thomson.

The Law of Psychic Phenomena, by F. J. Hudson.

Essays on Museums and other Subjects connected with Natural History, by Sir Wm. H. Flower.

Insect Life, by J. H. Fabre.

Glimpses into Plant Life, by Mrs. Brightwen.

Art, Sculpture, Architecture, etc.

Handbook of Light and Shade, by Mrs. Merrifield.
Hints on Sketching Nature.
" " Light and Shade.
" " Colors, by N. E. Green.
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A Guide to Flower Painting in Water Colors, by G. F. Rosenbery.
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A Short History of Architecture, by A. L. Tuckerman.
Recent School Architecture, by Charles R. Skinner.
Reason in Architecture, by F. G. Jackson.
Prize Design for Rural School Buildings, by F. W. Coburn.
Text Book of the History of Architecture, by A. S. F. Hamlin.
Modern School Building, by Felix Clay.
The Lighting of School Rooms, by S. H. Howe.
The Ventilation and Warming of School Buildings, by G. B. Morrison.
How to Decorate the School-Room, by F. W. Coburn.
Line and Form, by Walter Crane.
The Decorative Illustration of Books, by Walter Crane.
The Basis of Design, by Walter Crane.
The World and its People Photographed and Described.
Canada, Illustrated, by T. Mower Martin and Wilfred Campbell.
The Light of the World, or our Saviour in Art.
Little Journeys to the Homes of Eminent Painters, by E. Hubbard.
An Elementary History of Art, by Mrs. Arthur Bell.
Elementary Art Teaching, Edward R. Taylor.
Sculpture, Egyptian, Assyrian, Greek and Rome, by G. Bedford.

APPENDIX J.:—REPORT OF THE HISTORIOGRAPHER OF THE EDUCATION DEPARTMENT OF ONTARIO, 1907.

Synopsis of the Contents of Twenty Volumes of the Documentary History of Education in Upper Canada, 1791-1869.

To the Honourable R. A. Pyne, M.D., LL.D., Minister of Education.

I have this year completed the 20th volume of the Documentary History of Education in Upper Canada, from 1791 down to the year 1869.

Among the hundreds of original official, and semi-official, Documents in these volumes, there are quite a number of interesting and valuable ones, —some of them quite rare,— relating to the early records of Education in this Province.

It is interesting to know, (so far as I am aware), that this Province, and the Empire of Germany are the only two countries which publish a connected narrative of the History and Progress of Education.

In order to satisfy myself on this subject, so far as the United States were concerned, I corresponded with the various Historical Societies in that Country. From the replies which I have received I have learned that, although, some of these Societies are most generously subsidized by the State Government, yet none of them have devoted any special attention to historical educational subjects, except by way of biographical sketches of noted Educators, or Educationists.

It is true that the United States Commissioner of Education in his Annual Reports gives an extended, and most interesting, summary of the year's transactions in each of the States, and in foreign Countries, yet, in such records, there is nothing of a connected historical character.

In some respects these elaborate and invaluable systematized Reports, issued yearly by the United States Commissioner of Education in Washington, may be considered as a somewhat condensed and composite annual History of Education in all civilized Countries. It must, necessarily, in regard to special local Educational History, be brief and general, and, to a certain extent, fragmentary,—while our Documentary History deals fully with the subject, and is chronologically consecutive.

Some time since the English Department of Education adopted the United States system of issuing Annual Volumes on general and specific educational topics, rather than historical accounts of education in various Countries.

Should a Dominion Bureau of Education be established, as suggested to Sir John Macdonald by the Reverend Doctor Ryerson at the Confederation of 1867, the United States, and latterly the English system of issuing detailed accounts, and abridged sketches of education in the various Provinces, and other places, would likely be adopted, and an effort would, doubtless, then be made of seeking to harmonize our Canadian system of education, without in anywise interfering with the local administration of their educational system in the several Provinces and Territories of the Dominion.

In one of his Reports, the United States Commissioner mentions that Germany has published two unique collections of Volumes of German Educational History of special interest. The publication of this valuable collection has been secured by a subsidy from the Imperial Exchequer, by a vote of the Reichstag, likewise by substantial aid from the Prussian Department of Public Instruction, as well as by the German National Teachers' Association.

A Writer in the Commissioners' Report thus points out a distinction between the two methods of dealing with the History of Education;—the second of which I have invariably followed. He says:—

"Among the methods of presenting the History of Education, there are two distinct, if not antagonistic ones; the one deals exclusively, or chiefly, with the theories, or schemes of education, which have been advanced and discussed by philosophic writers, and have occupied the attention of the educational world. . . . The other method deals exclusively with facts, taken from documentary sources, from Government, Laws, or Decrees, from School Programmes, and Regulations, and from Records of Progress. . . . . It is the *Quellen Studium*, study of original sources, which is emphasized by modern scholars generally.

"It is the method which is adopted by modern historians, and is in accordance with the methods applied in teaching Natural History and Science. This mode of procedure,—the study of original historical sources,—has been taken hold of by educational, as well as by other students of history."

In this Documentary History I have in each volume, dealt with each

subject specifically, and, to a certain extent, separately: the Common Schools, the Grammar Schools, and the Colleges, etcetera.

In regard to the Common, (afterwards designated by Act of Parliament Public), Schools, I have traced their history chronologically from their first establishment by Act of Parliament in 1816.

It is true that, up to that time, a few good private Schools were established in Toronto, Niagara, Kingston, and other Towns, as noted by Mr. Gourlay, in his "Statistical Account of Upper Canada." And, in 1815, a number of persons in England, under the auspices of a "Society for Promoting the Education of the Poor, in Upper and Lower Canada," collected sums of money for this purpose. These funds were entrusted to a Society formed in Kingston and designated "The Midland School Society," and an Act was passed in that year to authorize that Society to establish Schools in that District. In the following year, however (1816), a general Common School Law was passed, which gave quite an impetus to the educational movement.

On the passage of this first Common School Act of 1816, quite a number of Schools were established in the various Counties, as recorded by Mr. Gourlay in his Statistical Volume. Some of these Schools were of a highly practical character, such as those in the Township of Hope. Mr. W. L. Mackenzie, in his book of "Sketches," thus refers to these Schools:—

"There are two Schools in Hope Township; one for the ordinary branches of education, and the other, on a larger scale, in which instruction was given to young girls in knitting, sewing, spinning , making straw and chip hats and bonnets, spinning wool and other useful arts of a like description."

It is a question, that, with all our progress and advancement in popular elementary education, we have many, if any, of such thoroughly practical and useful Schools in any part of the Province.

In the Act of 1816, providing for the establishment of Common Schools, a Legislative Grant of $24,000, was made to enable the inhabitants to open Schools in the several Districts of the Province, where needed. This sum varied from year to year, and in 1820, another Common School Act was passed, but the Grant was reduced to $10,000.

In 1824, another Common School Act was passed, in which provision was made for five things:— 1st, the education of the Indians; 2nd, the establishment of Sunday Schools; 3rd, the distribution of Religious Books and Tracts so as to afford "Moral and Religious Instruction," to the people; 4th, the appointment of a Provincial Board of Education to Superintend the Schools; and 5th, the Examination of Persons for the office of School Teachers.

The administration of the School Laws was subsequently assigned to the Provincial Secretary, and there continued until the appointment of the Reverend Doctor Ryerson in 1844, who in 1845 and 1846 soon re-organized the whole System of Education. In 1849, an Act was passed, granting one million of acres of land to form a fund for the support of Common Schools.

In that year an unusual and singular episode occurred in connection with School Legislation. A School Bill, having been prepared by the Chief Superintendent of Education and submitted to the Government, was entrusted to the Honourable Malcolm Cameron to bring before the Legislature. He was urged, however, by a friend of his in the County of Bathurst, (which County he represented in the House of Assembly), who was hostile to Doctor Ryerson, to substitute one prepared by this friend. Mr. Cameron substituted his friend's Bill and incorporated in it some of the clauses of the Chief Superintendent's Bill so as to make it acceptable. The hostile Bill was passed, and was assented to by the Governor-

General. As soon as Dr. Ryerson was aware of this, he wrote to Attorney-General Baldwin, expressing his strong objection to the Bill, as containing many ill-advised provisions, and being anti-Christian in its character, and stating, that, should the Bill go into operation, his "office would be placed at the disposal of the Government." Mr. Baldwin expresses his great regret that the burning of the Parliament House, and other matters had prevented him from being able to give attention to the subject; but that, as the Cameron Act did not go into operation until the next year, the Chief Superintendent was to administer the Act and Regulations then in force, until a new Act could be prepared and passed. The Cameron Bill, therefore, never went into operation. It is the only instance, so far as I know, of an Act passed by the Legislature, and having received the Royal Assent, being set aside, and not allowed to go into practical operation by order of the Executive Government.

By direction of Mr. Baldwin, the Chief Superintendent prepared a comprehensive School Bill, which was passed in 1850, and became, as Doctor Ryerson expressed it:—"the Charter of the School System of Upper Canada."

The establishment of Grammar Schools, as given in these Volumes, dates as far back as 1797, when the Legislature of Upper Canada memorialized the King to make a Grant of the Crown Lands for the establishment of "Free Grammar Schools, and a College, or University." In reply to this Memorial, the Imperial Government decided to make the terms of the projected Grant much more liberal and extensive than those of the Memorial, and, in the words of the Despatch of the Colonial Minister, in reply, the Grant was made "for Free Grammar Schools in each District, and, in due course of time, for the establishment of other Seminaries of a larger and more comprehensive nature, for the promotion of religious and moral learning, and the study of the Arts and Sciences."

The Grammar Schools which were established under the authority of an Act of Parliament in 1809, in the terms of this Imperial Grant, were really superior private Schools under a new name. They were, in effect, Schools for the children of the higher classes, and were almost solely patronized by them, and official persons.

Another class of very superior Preparatory Schools was established by the United Empire Loyalists in the chief centres of their settlements, such as Kingston, Cornwall, Bath, York, and St. Catharines. The most noted of these was the Bath Academy, taught by the Father of the Honourable M. S. Bidwell; the Grantham Academy at St. Catharines; and the Newburgh Academy. Then the noted School at Cornwall, taught by the Reverend Doctor Strachan, and afterwards the famous "Blue School" in York, taught by the same distinguished man. There had also been a superior private school previously established at York, and was taught by the Father of the Honourable Robert Baldwin; and the London District School taught by the Reverend George Ryerson, who was assisted, as Usher, by his more distinguished brother, the Reverend Egerton Ryerson.

The vicissitudes through which the University Question in Upper Canada has passed, from the time that Governor Simcoe projected a "Church University" in Upper Canada, to the last memorable contest on the question at Quebec in 1860, have been many and varied. The successive details of the history of this prolonged agitation are fully recorded in these Volumes. Through the active agency and efforts of Bishop Strachan, a Royal Charter

was granted to King's College, Toronto, in 1827, although the College itself was not opened until 1843, and after Victoria and Queen's Colleges had been established, and were in active operation.

The terms of this Charter of King's College were very unacceptable to the majority of the people of Upper Canada, and led to active efforts to get it recalled, or modified. At length a Bill to alter the objectionable terms of the Charter was introduced into the House of Assembly. It was strongly opposed on the ground, among others, that it was "not competent for a Colonial Legislature to alter the terms of a Royal Charter." The objection was overruled, however, and I have given some legal opinions on the subject. Successive efforts were made by the Honourable John A. Macdonald, the Honourable W. H. Draper, and others to pass Bills on this question, but without success. Attorney-General Baldwin proposed one in 1843, but went out of office soon after it was submitted to the Legislature. He was, however, successful in 1849 with his elaborate Bill to convert King's College into the University of Toronto.

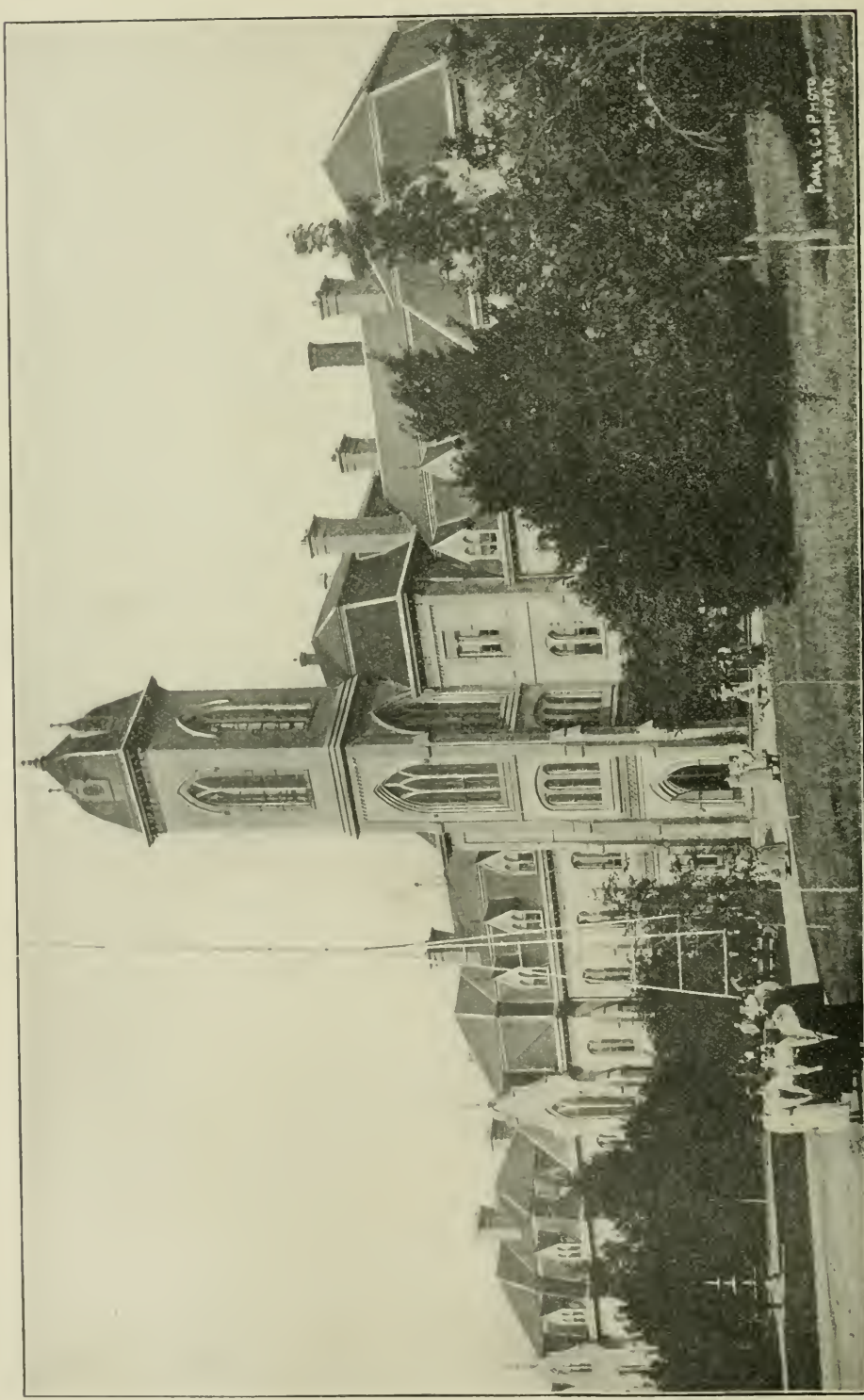
These Volumes contain ample records of the proceedings of various Churches in regard to this University question. They also contain the Annual Reports of the Toronto University, (so far as I have been able to obtain copies of them), and the outlying Colleges, as well as other educational details of interest and value down to the year 1869.

Your Obedient Servant,

J. George Hodgins,

Historiographer of the Education Department of Ontario.

Toronto, 9th December, 1907.



Institution for the Blind, Brantford.

APPENDIX K.—THIRTY-SIXTH ANNUAL REPORT OF THE ONTARIO INSTITUTION FOR THE EDUCATION OF THE BLIND, BRANTFORD, BEING FOR THE YEAR ENDED 30TH SEPTEMBER, 1907.

Hon. R. A. Pyne, M.D., LL.D., *Minister of Education*:

Sir,—I have the honour to transmit herewith the Thirty-sixth Annual Report upon the Institution for the Education and Instruction of the Blind, Brantford, for the year ended 30th September, 1907.

I have the honour to be,
Sir,
Your obedient servant,

H. F. Gardiner,
Principal.

Brantford, October, 1907.

THE INSTITUTION FOR THE EDUCATION OF THE BLIND

In presenting the thirty-sixth annual report of the Ontario Institution for the Education of the Blind, I am glad to be able to state that much useful work has been done in and for the school, and fair progress has been made by the pupils, during the year just concluded, notwithstanding that the attention of officers, teachers and pupils was distracted to some extent by the holding of a public investigation on the premises while the school was in session, and that their labors were interrupted during the months of January and February by an epidemic of measles, which left some of the pupils in weak condition for the rest of the term. The Physician in his report, which is appended, again calls attention to the lack of proper facilities in or about the Institution for taking care of a number of sick persons, and he emphasizes the necessity for a better system of heating and ventilation, which has been frequently recommended, but never provided. It was my privilege a few days ago to inspect, in one of the Public School buildings of Brantford, a new and complete apparatus for heating and ventilating every class room, bringing in a constant current of warm, fresh air; and I could not help thinking how much more necessary was such a provision for a building like ours, in which the pupils spend, not five, but twenty-four hours of each day, and that seven days of the week. Consider further the low vitality of most blind children, their inability to run about and play out of doors as seeing children do, and surely no one will grudge the cost of giving them that best of all medicines, an abundant supply of pure air. Two of the lady teachers lost some time through illness during the session, and two of the male teachers resigned, necessitating a change of arrangements which could have been much more conveniently made, from the Institution point of view, in the vacation than in school time.

Sickness and other causes compelled the withdrawal, before the end of the session, of nineteen pupils who had been enrolled, but at the close there were left ninety studying Arithmetic in five classes, fifty-three studying Grammar in three classes, seventy-six studying Geography in four classes,

fifty-three studying Physiology in three classes, sixty-eight studying embossed or point reading in four classes, thirteen studying Latin in one class, fifty-seven studying pencil writing in three classes, twenty-seven studying English and Canadian History in one class, thirty studying Object Lessons in one class, nineteen studying English Literature and Composition in one class, eighty-nine studying Bible Geography and History in five classes, ninety-two studying Spelling in five classes, twenty doing Kindergarten work in one class, twelve who had cut willow on the farm, thirty-seven who had helped peel the willow, twenty-five who studied cane chair seating, sixteen who had learned to make netted hammocks or horse-nets, thirty-seven who had studied knitting, sixteen who had learned to crotchet, twenty-four in the sewing class, thirty-nine in the bead-work, ninety-four in gymnastics, forty-seven taking lessons on the piano from three teachers, ten on the organ, thirty-five studying singing in chorus, two studying solo singing, twenty studying piano tuning. With this quantity and variety of work going on, the right of the Institution to be considered—and officially designated as a School is indisputable. It is not a Hospital, it is not a Reformatory, it is not a Home nor an Asylum, yet applications, backed by all the influence the applicants can bring to bear, are received for the admission of blind persons ranging in age from three years to seventy-five years, and letters addressed to the "Blind Asylum" are too common to occasion remark. I would strongly advise that the name be changed from "Institution" to "School" for the Blind.

The method of teaching, in such subjects as Arithmetic, Geography, History and even Spelling, has been largely by lecture and dictation, much less use being made of text-books than in similar schools in the United States. The reason for this is that it has been considered too expensive to prepare text-books in raised type for this school alone, corresponding to the books used in the Ontario Public and High Schools, and many of the United States books would not be suitable for Canadian children to use. The School for the Blind at Halifax, N.S., uses English Braille, whereas we use New York point print, in which we have accumulated a large general library. In the United States a book in New York point will be purchased by many schools and their constituents, and Congress has voted a large endowment to be annually distributed among the schools in the several States, for the purchase of books for the blind, hence it has been practicable to use the stereotyping process in the preparation of books in that country. It seemed to me absurdly expensive to make brass plates for such a limited edition of any book as we could use in one school. But I have recently ascertained where I can obtain movable New York point type, and I am in correspondence with a Boston firm with regard to the cost of an outfit. With the Minister's permission, I hope to gradually overcome the disability which I have described, by supplying the pupils of this Institution with Ontario text-books in tactile print, thus reducing the amount of dictation and stylus-writing, to the relief of both teachers and pupils.

I propose also, following the practice of several of the United States schools, to abandon the teaching of embossed line letter and teach the point alphabet from the start, instead of having the pupils learn to read "embossed" first and "point" afterward. This will throw out of use a number of books now in our libraries, but nearly all of them are already printed in point. The point is easier to read by touch than the embossed; indeed, some pupils read the point with facility whose fingers could not master the embossed letters. As writing with the stylus is contemporaneous with the learning of the point letters, the pupils thus taught will be able to take

notes and to read music at an earlier age than is possible when they spend considerable time at school learning the embossed system.

The work done in the literary department of this school is practically the same as is done in the Public Schools, with the necessary exception of Drawing, and with the addition of Latin. Most of the blind pupils belong to families in the laboring class, and if they had their sight they would leave school at or below the age of sixteen and go to work. Hence there is not much demand for instruction in High School subjects, and I doubt if it would be an unmixed kindness to encourage some of our pupils to go to College and work for a B.A. degree. The questions, "What will he do with it? Will it help him to earn a living?" will not down. But the Institution can point to some of its ex-pupils who have held their own with seeing pupils in literary examinations. In April last, Rixon Rafter, an ex-pupil of the O. I. B., received the degree of B.A. at Queen's University, and Arthur Barnard, another ex-pupil, received the degree of M.A., also winning the Louise scholarship in Theology. At McGill, Sherman Swift, another ex-pupil, graduated with high honors in the Modern Language department. Charles W. Carruthers, another ex-pupil, passed his matriculation examination at Woodstock College and expects to enter Toronto University this Fall. He stood third in a class of twenty (all the others having sight) for Matriculation in Arts; fourth in a class of twelve in second-class English; fourth in a class of nine in first-class Latin; first in a class of four in first-class French; second in a class of eight in first-class Ancient History; first in a class of twelve in second-class Chemistry; second in a class of five in first-class Mathematics (Algebra and Geometry); sixth in a class of six in second-class Junior Physics. John Gray, another ex-pupil, who is studying Osteopathy at Kirksville, Mo. wrote me that his marks stood at 98 and 100, and added: "I am now realizing the benefit which I got in drilling on mental arithmetic, biographies, quotations and other cumbersome brain-twisters, which developed my memory and gave me a power to create mental pictures, which is a blind man's sixth sense."

In last year's Report I presented a synopsis of evidence taken and of addresses given on blindness and the blind, the design being to give information to, and awaken the interest of, legislators, the press and the public on matters which concern an afflicted and deserving class of the population. I sent copies of that Report to all the ex-pupils whose addresses I could obtain, as well as to the parents of the pupils now in attendance, and with the consent of the Department I shall incorporate in this Report a number of items from various sources which are likely to be appreciated by blind men and women, and I shall say some things to parents which it is not convenient to convey to each one by private letter, or by special circular. It is the duty of the staff of the Institution to do all that can be done for the betterment of the children and youth sent here for care and instruction, and there is ample reward in the consciousness of duty well done; but the teacher would be less than human whose heart did not respond to expressions of gratitude such as come from some of the parents. The following are a few samples selected from many received:

One parent wrote: "Many thanks for your kind letter and the words of praise for the girls. That, added to their official report, is certainly most gratifying. My daughters have been very happy with you, and the years spent in the O. I. B. will make their lives so much brighter ever after. Please accept my sincere thanks to yourself, the teachers and all those who have been so good, kind and patient with my girls, so far from home. I

think you are doing a grand work, brightening so many lives that otherwise would be very dreary. I thank you again for all your kindness."

Another parent: "I also wish to thank you very much for all your kindness to our daughter and to us, and we thank you for the school report of her progress. We consider she has done capitally. Many thanks to all concerned."

From a pupil's mother: "After examining ———'s report we were very pleased with the progress he has made and it was very satisfactory."

A pupil's father: "I beg to acknowledge the receipt of report of progress of our daughter ———— in the various studies and we wish to say we are greatly pleased with it. Many thanks to you and staff, who have been so kind and helpful to her."

From a Children's Aid Society agent: "I thank you for affording me the opportunity of seeing the Institute and the classes in session as well as leaving the little girl happy and contented in her class. I also want to thank you for the helpful incident you told me in your office about the girl who was helped to see even dimly approaching objects. I believe I shall always appreciate more the ordinary blessings of life. Your helpful morning service is also impressed on my mind, and the hearty singing of the children and older scholars."

From a pupil in vacation: "I am not lonesome for the school yet. I am too glad to be with my parents, but I think that you'll see me back at school again next fall, for I like you all too much to stay away now, and my parents say that I learned a good deal for the time I was there. Good bye, Mr. Gardiner, from your loving scholar ————."

From a clergyman: "Many thanks to you for the great interest and kindness about ————. I am very thankful to you. Please accept my sincere gratitude for yourself and teachers—so good and kind at the imitation of their Principal—*re* all the students."'

A parent: "I take pleasure in writing a few lines to you to thank you for your care of my boy. He has done wonderfully well. I am so glad I sent him to your school. I wish I could have sent him before, but I could not; he was not strong enough. He is doing well. I could not ask anything more. ———loves all of you very much and I know all of you are good to him. I will close hoping you will have another successful year, and thanking you once more, I remain as ever your debtor."

An ex-pupil: "You may think I have forgotten all about you because I have not written to you. I am sorry for not writing sooner, as you were always very kind to me. I often think of you, wonder how you are, if you are well."

A pupil home for vacation: "I suppose it will be very quiet since the pupils left the Institution. I have been studying the point print a little since I came home and they all think it is wonderful, and I think it is a great blessing. It makes me happy to be able to read and write a little. I will close with love to all from your affectionate friend."

A pupil: "Father and mother were very well pleased with the progress I made last year and are quite willing that I should go back again, so if nothing comes in the way I will be ready to come when I get the word. I will close with love from your little friend. 'God be with you till we meet again.'"

An ex-pupil: "I thank you for your kindness and will always have a good word for you and also for the teachers. I will always love the school as it has helped to make my life happy. Father and mother send best wishes to you."

A mother: "We got ———'s report the other day and were glad to see he is getting along so well, and thankful to you for sending it, and I hope ——— will be a good boy and do as he is told, for very often I feel very lonely without him, but when I see how he is learning, you don't know how thankful I am to know there is such a good place."

From a mother: "We are very glad to hear that ——— is out of danger and we hope she is still improving. It is a great comfort for us to know that she is so well looked after and is in such a comfortable place. I am very thankful to you for all the trouble you have taken with her and the interest you have shown in her behalf even before she took sick."

A mother: "I am very glad that there is such a good Institution to send him to, and I take this opportunity to thank you for your goodness to my boy."

A father: "We have received the report of progress of our daughter ——— and we are indeed very pleased with it, and we think great praise is due to her tutors who helped her to make such progress in so short a time, for which we sincerely thank you and through you all who have been so interested in her and so kind to her."

A mother: "I received your report of pupils' progress and was pleased to know ———— took so many marks for good conduct. I think he has done very well for the short time he has spent in the Institution. I am well pleased to know that he is in such a good place. I hope he is not too much trouble."

From a parent: "Mr. Gardiner, It is with a heart full of thankfulness that I pen these few lines to you to thank you for your fatherly care of my dear boy. He is doing well and has done far better than I expected. I have a great interest in your school and will do all I can to get others to send any who need such a school. I now close, asking God's blessing on your work."

From a mother: "I think it is simply wonderful what my eldest daughter has learned in her three years, and she has enjoyed the work as well. You have all been so good and kind to them both. Will you kindly convey my sincere thanks to all those who have made it pleasant for them and accept a large share for yourself. Thanking you very much for past kindness, I am," etc.

From a pupil's parents: "I have often thought of writing to you, to express our appreciation of your kindness to our daughter, and of the watchful care for her welfare in the school. I know, from her conversation when she was home at Christmas, that you are most careful to do all that is possible for the advancement, and also for the happiness, of those under your charge. We are satisfied that our daughter is under the care of one who takes so much interest in all the pupils, in every way, morally, physically and mentally."

From a pupil's father: "I cannot thank you too much, or convey my sentiments properly to you and the teachers, for what you have done for my boy. To you and your staff I send the best thanks of myself and family for your devotion and kindness to suffering humanity."

While I am proud to have received such kind and appreciative letters as these, for the most part from people whom I have never seen, it is not for the mere gratification of personal vanity that I include the extracts in the Report, but rather to serve as an introduction to a subject upon which I have been asked by several correspondents to give an opinion. Should there be a Compulsory Education law applicable to the blind? I have in mind two recent cases in which girls who ought to be in the school, who

want to come and whose mothers want to send them, are kept home because their fathers do not like to part from them. I know two boys who actually came to the school, whose fathers were quite willing to leave them here, but the mothers were lonely without the boys and they are now at home growing up in ignorance. Two other boys were here for a short time with the consent of both parents, but they were homesick and the parents took them away before the boys had time to become acquainted and settle down to their work. These and other cases, including some in which children who should have been here at seven years of age were kept at home until they were fifteen or sixteen, would seem to point to the propriety of a compulsory law, and such laws are on the statute books of several States, though I have not heard of their rigid enforcement anywhere. But there is another side to the question. The afflicted child—blind, deaf, lame, feeble-minded—is generally the pet of the household, the one for whom the love of the father and the mother is most intense, and I do not covet the task of forcibly taking that child from the unwilling arms of its parents, and carrying it perhaps several hundred miles from home. I have nothing to say against the law which says that every seeing boy and girl shall go to school, obedience to the law involving separation of the child from the parent for a few hours each day. But when the separation is to last three-quarters of a year, the consent of the parents should be obtained. More correspondence, more canvassing and visitation may be required to get the child into the school; in some cases all efforts may fail, but of the two evils I consider the compulsory system the greater. To do good work, the teachers want the sympathy and the moral support of the pupils' parents; in the interests of discipline expulsion from the school should be regarded as the worst of all possible punishments; it is desirable that the parents should retain their interest in their children, providing them with clothing and looking after their comfort and happiness; willing and grateful parents do these things gladly, but indignant parents, smarting under a sense of wrong, would oppose rather than assist. I have taken much pains to ascertain the whereabouts and circumstances of all the blind children in Ontario, not attending school, and I do not think the number is large enough, in view of the other considerations outlined above, to justify the enactment and enforcement of a compulsory law.

The parents, the teachers—all who are concerned in the operations of the school—judge of its work by the results. But the labor of the teachers is sometimes neutralized by the thoughtlessness of parents, who bring their children to Brantford days or weeks after the opening of the session, take them home for Thanksgiving, Christmas and Easter, and keep them home for days after the other pupils return, heedless of their own children's loss and of the damage done to other children. I ask the parents to read and take to heart the following article from the *Arkansas Optic*:

"The great and good people of our State have built and are maintaining at great cost to them a splendid school for the education of the deaf. No one who has ever seen the work of our school has ever begrudged one cent of this money. No one who has seen the light of intelligence kindle in the eyes of our little children and the smile of happiness spread over their faces as they realized for the first time that they could learn has ever regretted this expenditure of money. No one who has seen our pupils go out into the world, after graduating, with head erect with the conscious power of a well-trained mind and hand to battle successfully shoulder to shoulder with . is hearing brother in the conflicts of life has ever wished our appropriation of money to be less. Every man who has observed the progress of our children after having finished our school knows, and all with whom we have ever

talked have said, that he wished all the money he has spent had been spent as wisely as the money used here.

"We wonder if the parents of deaf children know that education is a kind of chain, made of links, and that each lesson taught is a link. We wonder if they realize that education is like the building of a stone house and every subject, or principle, taught is like a stone of that house. We wonder if they would try to leave the second story out of the house and put up the third story without anything for it to rest upon. We wonder if they don't know that a row of stone cannot be left out without the whole building tumbling to the ground. Don't they know that if one stone is taken out the whole building is made weaker? Don't they know that, when the links of a chain are missing, there is no chain? Don't they know that every lesson taught depends on the one before it in some way? Don't they know that their children cannot understand any lesson until they know the lessons that come before it? Don't they know that every time they cause a child to miss a lesson they are making life harder for the child? Don't they know that such action is a persecution of the child?

"Parents, for the sake of your children, do not let one of them miss a lesson. Under any proper course of instruction one lesson missed will throw a child into muddy water for a week; being away from five lessons will cause trouble for three or four months, and ten lessons skipped will make it impossible for an ordinary child to be promoted. When a child is not promoted, it has to do the same work over again the next year. So you see that to lose ten lessons is about the same as losing the whole year. There is no such thing as a child catching up with its class, or making up for lost time. It is impossible for the ordinary child and most of ours are of the ordinary kind.

"Be just to your child, be fair to our teachers who weep and pray over and labor with your child for its progress. Even if the teachers had the time to go over the lessons which the class learned while your child was absent for the benefit of it alone, it is not human nature for them to be as earnest and clear in their explanations to one as they were to the whole class, and human nature is the particular variety of nature our teachers have. If any parent knows of a teacher with a better kind of nature, please send him or her around at once.

"But even if the teacher could be as enthusiastic over one as over a whole class, the child would be embarrassed and not understand as well and then the whole class would be losing while the teacher was trying to help your child. It is not right for you to injure your own child, to say nothing of the wrong you do other children in the same class, when you take your child out of school. It is wrong; it is unjust; it is inexcusable.

"Why is it that you place so little value on the education of your child? Will you let a stranger be more anxious to help your child than you? Will you hinder your child and injure it while the State is trying to help it? Is it love that prompts you to keep your child at home or to take it out of school? We thought love made us willing to make self-sacrifices for those we loved. You know it is best for your child to enter school on opening day and be there at every lesson. Isn't it a foolish sentimentality that causes you to do otherwise? Real love would force you to do the best thing possible for your child no matter how much more pleasant it would be for you to do otherwise. Be reasonable. Help your child by keeping it in school until closing day.

"We are glad to say that our patrons are showing good judgment and much love for their children this year. Not one parent has asked for his

or her child to come home to help with the crop, though it is about crop planting here. We hope that no such request will be made. We believe that you love your children too much to injure them by taking them out of school. We could name pupils that have not been promoted in four years just because they lost a part of each session. They are discouraged. They will never make any progress. Their parents are to blame for this, no one else. In these cases they have proven their children's worst enemies, though parading under the garb of love.

"Parents, for your children's sake, and in the name of all that is good, and merciful, and kind, let me beg of you to keep your children in school every day of the session. We want to benefit them. Help us to do so."

I have seldom had to encounter parental dissatisfaction with the pupils' progress, and nearly all the parents show proper interest in their children's work; I would prefer dissatisfaction to indifference, for to those who have to do with teaching and training defectives—blind or deaf—the business is serious and arduous. To illustrate by examples from this school, the originals of which would be easily recognizable, might be in doubtful taste, and I will run no risk of hurting the feelings of either the children or their parents in that way. A couple of selected illustrations will suffice, for in most matters connected with the blind experience of one school or country applies to all.

"A visitor sat watching a teacher in the Colorado school as she labored patiently with the least progressive deaf-blind pupil, trying to teach her about the members of her family. At the end of the lesson the teacher told the visitor how she had found it difficult to get whole sentences from the pupil, but that now after three years of apparently hopeless drill the light was beginning to dawn and the results though meagre were appreciable. 'I see,' said the visitor, but, with a sigh at the tremendous labor involved, 'Is it worth while?'

"We do not know." says the Colorado *Index*. "We do know that a frail, delicate girl of fifteen was brought to us three years ago, sightless and practically soundless, and as intractable at times as the wild beast of the jungle. Her face bore the mark of pain and discontent and her time out of school was spent in sitting about without a thought as far as we could determine. We know that to-day she is usually bright and happy, delighted at the least attention shown her and appreciative of all that is done for her. We know that she is one of the neatest girls in the school in the care of her person, handling her knife, fork and spoon at the table as well as the best of our blind children, and we know that she applies herself willingly to the tasks allotted to her in the sewing department and elsewhere. We know that in her room instead of moping she is usually found reading the little sentences prepared for her by the teacher, or writing something original as far as she knows what to write, and we do know that she enjoyed the parade last week almost as much as any of the pupils, and that she takes a real interest in whatever goes on about her. We do not know whether it 'is worth while,' but we remember reading somewhere that when the Master was down here on earth He said something about 'a cup of cold water' to the little ones and seemed to think that even a little child was to receive a great deal of consideration. We are sometimes wondering whether after all, from His standpoint, there is a very great difference in value between producing the smile of intelligence and pleasure and building a railroad, and we often have grave doubts as to whether in the light of infinite Majesty, Power, Wisdom, Goodness and Truth there will be in the end any

very marked difference in the standing of pupil, teacher and railroad builder."

Another instance, from the report of the Perkins Institution: "In the smoky city on the banks of the Allegheny, where the fires of Vulcan are never quenched, and the smoky pall is never lifted, a helpless little lump of human clay is found, alive to be sure, and breathing, but sightless, voiceless and devoid of the sense of hearing, the pitiful ruin of the temple of a baby soul, but ill-furnished, windowless, and as yet all but untenanted. This poor bit of human driftwood, too, is gathered in and brought to an institution. The years pass swiftly, and we are face to face with a startling transformation. We see a bright, intelligent boy, on the verge of manhood, with well-trained mind, able by speech and writing to communicate with his fellow-men, on the printed page to scan the storied wisdom of the ages, and from this rich harvest field to gather the finest of the wheat. We find a young man deeply interested in doing helpful things, possessing mechanical skill that would put many seeing men to shame. No intricate system of training is responsible for such results as the foregoing, but the rare patience, tact and splendid devotion of three or four consecrated women have done these things for Thomas Stringer, and in greater or less degree for others similarly handicapped."

"Here we have a deaf child—a wee little tot of six or seven—borne from the arms of a weeping, trembling, heart-broken mother; her 'pet,' her very life, it seems, and given over to our protection and solicitations, to begin the long and tedious task of moulding and fashioning the tender and bruised plant and nurturing it to wholesome and sweet growth. The child is spoiled, fractious, stubborn and unruly, caused from over-indulgence at home because afflicted. These habits have to be carefully and tenderly and gradually changed by those in charge. The morals and manners of the child have to have care and attention. And what is true of the deaf child is true of the blind one. Then, too, a great majority of the children come to us physically unsound, perhaps not apparent, caused by the insidious disease that has bereft them of sight or sound. To all outward appearances they are physically perfect. A doctor's diagnosis may verify the outward appearance. But those who have had long and intimate acquaintance with their children know that appearances are oftimes deceptive. The housing and feeding and care of such children is necessarily a greater responsibility than the taking care of the same number of normal children. These are only a few of the responsibilities imposed upon the superintendents and teachers of schools for the deaf and blind. Ours is a long 'rounding out' process and it is only by eternal vigilance in every phase of life and living that we can wrest ultimate victory."

"Sound health is recognized by all educators worthy of the name as the most important consideration in the training of children. In the case of sightless children the question of health must occupy a much larger share of the educator's attention than would be required in the training of the seeing, for three reasons: The fact of blindness itself is often due to some abnormal or diseased condition of the body in the child or in one or both of its parents; moreover, blindness that is congenital or acquired early in life tends to render its victims timid and inert, and thus to retard the healthy physical development of the child through lack of exercise and outdoor air; finally, bodily weakness and lack of cleanliness in the seeing are powerful agents in the generation of certain vices. How much more so then in the case of the sightless, who are constantly thrown in upon themselves.

"It often happens,—indeed we might almost say it usually happens—that from one cause or another the child who comes to an institution for the blind is sadly deficient physically. The loss of sight in itself tends to render the victim inert and timid, but as if this were not enough, parents themselves all too frequently, in mistaken kindness, allow their sightless children to mope about the house, they wait upon them, dress them, and even feed them, instead of teaching them to do most things for themselves and seeing to it that they get plenty of healthful play out in the sunshine and the open air. The result is that the poor victims of this mistaken sympathy remain feeble and undeveloped in body and consequently dwarfed and impoverished in mind and spirit. Only a year ago such a boy came to us, a pitiful little figure, with sallow face, weak body, spindling little legs, and ankles so weak that he could walk about only for a little while at a time;—with no interest in anything or anybody. The writer has never seen such a change in a human being within a single year. The ankles have gained strength, the puny arms and legs grown well rounded and strong, and the face grown young again. The breathing is deeper and stronger, the new, rich blood flows faster, the dormant, ill-nourished brain has been quickened and aroused, and now the erstwhile feeble old man of twelve is a cheerful, natural boy of thirteen, who exercises regularly, plays freely, romps with other boys, and is becoming interested in the studies of the class-room and the other interests surrounding him."

The reports of the Physician, the Oculist, the Literary Examiner and the Musical Examiner are appended. I have noticed a suggestion that the services of a regular salaried physician should be dispensed with, and a doctor be called in when required, as is done in private families. My preference is for the existing system. It is a satisfaction to the pupils' parents to know that the physician makes daily visits to the Institution, seeing every child who is reported to be ailing. Often the ailments are very slight, and the Matron and nurses would not advise sending for the doctor in many of the cases, but the children themselves and those in charge of them feel safer and better after the doctor has pronounced on the case. Dividing the physician's salary by the number of people he has to look after, some of whom are never sick while others require frequent attention during the session, the cost per capita is not excessive. The cost under the fee system for the same number of visits would be greater.

Two of the cases which came under the Oculist's attention require special mention, involving as they do the question of eligibility for admission to the school. With practically normal vision when the eyes are in a state of rest, these pupils were unable to use the eyes for even a few minutes without blurring, pain, watering, headache and other discomforts. One of them, a young lady, had not been able to attend the Public School since the age of eleven; the other, a young lad, dated his asthenopia, or weak sight, in his single eye from an accident by which the other eye had been destroyed. Both these pupils were clearly "unable to attend a common school and read ordinary type without injury," but the unrestricted admission of weak-sighted people to the privileges of the school for the blind might open too wide a door. From my experience, however, I may say that the tendency of people with defective vision is to magnify rather than minimize their seeing ability. Some visitors have expressed surprise that they did not find all our pupils totally blind. As stated in the thirty-fifth Annual Report, "the scientific definition of blindness is the absence of light perception, and the practical definition of blindness is a state in which no occupation can be followed for which vision is required." Some of our

pupils can see to go about in daylight as well as a person with normal vision can see in twilight, in moonlight or in starlight: but that does not imply ability to read by sight or to do any work requiring vision. In practice, it is a great blessing to the blind attending the school that there are some pupils with partial sight among them, for the latter serve as guides to the former in going to church, to town, and in taking exercise about the grounds. Were all the pupils totally blind, the teaching and official force of the Institution would have to be considerably increased.

For the last few years the Literary Examiner appointed by the Department has devoted four days to the work of examination. I recommend that the time be extended to five days—a full school week. Some years ago, there were two examiners, who spent three days each at the work. To do the work thoroughly, five days are required, for all the teachers are equally interested in having full justice done to their classes, and there are some odds and ends to be reported upon, which cannot be properly classified as literary. I observe in the newspapers a demand that the number of examinations in the schools for the sighted shall be reduced, as the strain is bad for the pupils' health, and teachers and parents are beginning to see that education does not consist in cramming for examinations. In a school for the blind it is even more important than in a school for the sighted that the tension should not be too great, on account of the inferior physical condition of the blind. Our plan is to avoid competitive examinations, but to have the teachers review the pupils' work frequently. Twice during the session the standing of every pupil in every class is tabulated from the daily class books of the teachers, the results being communicated to the pupils and kept on record, and a copy being mailed to all the parents and guardians. Then, towards the end of the session, the two gentlemen appointed by the Government come to the Institution and examine the pupils in all the literary and music classes. If there are no famous victories to be recorded there are no physical collapses or mental wrecks.

As the Musical Examiner points out in his report, there was no graduating class this year, but we expect to make an extra showing next year (1907-08). At a special examination in the month of March, Horace Valiant passed the Toronto College of Music second year piano examination with first-class honors. The Theory examinations, held in the first week of June, resulted as follows:

Second year Counterpoint, first-class honors, Thomas B. Kennedy.
Second year Harmony, first-class honors, Thomas B. Kennedy.
Second year History, honors, Thomas B. Kennedy.
First year Harmony, first-class honors, Charles Lavender.
First year Harmony, honors, Louise Deschenes.
First year History, first-class honors, Charles Lavender.
First year History, first-class honors, Louise Deschenes.
Second year Practical Harmony, honors, Thomas B. Kennedy.
First year Practical Harmony, first-class honors, Chas. Lavender.
First year Practical Harmony, pass, Louise Deschenes.

At the very beginning of the session of 1906-07 Mr. George A. Ramsay, Supervisor of Boys, tendered his resignation, to take effect at the end of the year.

The Brantford papers of December 19th stated that at the close of the weekly entertainment at the Institution for the Blind on the preceding evening, Mr. Richard Henderson, one of the pupils, advanced to the plat-

form and delivered the following address to Mr. George A. Ramsay, who is retiring from the position of Supervisor of Boys:

"Dear Mr. Ramsay,—We, the male pupils of the Ontario Institution for the Blind, having learned that it is your intention to discontinue the work in which you have been so successfully engaged during the past fifteen months in order to qualify yourself for the medical profession, take this opportunity to express our regret at parting from you, and at the same time to convey to you our best wishes with regard to your future life.

"We know that you have worked hard, in the gymnasium and on the campus, to build up the health and strength of our bodies, and we can one and all testify to the good results of your labors. Amid the annoyances which attend the care of so many boys, of varying ages and diverse dispositions, you have been kind and patient, and the boys will not forget you.

"That you may also remember us, and may be reminded that we appreciate what you have done for us, we beg your acceptance of this travelling bag, with the assurance that it is but a small token of our high esteem.

"Signed on behalf of the boys,
"Brantford, Dec. 18th, 1906."

Mr. Ramsay was taken entirely by surprise, but he expressed his thanks for the compliment and his appreciation of the good will and courtesy that had been shown him by the pupils from the day he came among them. They had acted like gentlemen. He would never lose interest in the school, and he hoped in future years to renew acquaintance with many of the pupils. His relations with the Principal and the staff had been agreeable, and he went away with the most friendly feelings toward all with whom he had been associated.

Mr. Lorne D. Atkins, who was appointed to succeed Mr. Ramsay, began his duties on March 28th, and resigned on September 9th.

Mr. Ernest A. Humphries, Musical Director, resigned on December 5th, to take effect on January 31st.

The *Brantford Expositor* of January 30th, 1907, said that "at the close of the weekly entertainment in the Music Hall of the Institution for the Blind last night, Mr. E. A. Humphries, who is about to vacate the position of Musical Director, which he has filled for over six years, was called to the platform and presented with a gold-headed cane, the gift of the pupils. An appropriate address was delivered by Thomas Kennedy, a pupil from Guelph, and the cane was handed to Mr. Humphries by Victoria Thomson, a pupil from Ottawa, both the girls and the boys having contributed to its purchase. Mr. Humphries, in returning thanks for the handsome gift, spoke at some length upon the improved relations between the pupils and the teachers since he had joined the staff, confidence and affection now existing where less pleasant feelings had once been in evidence. He personally desired the good of every pupil, teacher and officer, and he would always be glad to hear of progress made and prosperity enjoyed. He counselled those who had been his pupils to work as earnestly and cordially with his successor as they had worked with him, for he would be only too pleased to know that they were doing better in the future than they had ever done in the past. He was leaving the Institution voluntarily, to better himself financially, but he would ever look back with pleasure to the six and a half years spent in the O. I. B. and would cherish to his dying day the friends with whom he had been there associated. Short speeches were made by Mr. Gardiner, Mr. Hossie and Miss Gillin, commending the spirit of the pupils and wishing God-speed to Mr. Humphries who is about to remove to Parkhill, to go into business there as a merchant."

Mr. W. Norman Andrews, who was appointed to succeed Mr. Humphries, began his duties on February 1st, 1907.

On June 11th, Miss Elizabeth Loveys, teacher of sewing, gave notice of her wish to retire, after thirty-two years of faithful service.

On August 15th, Miss Melevell Baird was appointed to succeed Miss Loveys, and she began her duties on September 25th.

On September 13th, Mr. Walter B. Donkin was appointed Trades Instructor, his duties to begin on September 25th.

Attendance.

The total registration of pupils in the session of 1906-07 was 123, exactly the same as in the session of 1905-06; at the opening on September 26th, 1906, there were 110 pupils as compared with 107 at the opening of the preceding session; at the close 104, as compared with 111. Of the nineteen pupils who were present during a part of the session, but did not remain until the end, two (males) went away in poor health, two (males) did not return after Christmas holidays, and one of them was afterwards reported to be attending a public school; one (male) went home to consult about farm improvements, one (male) left to visit friends on his way home, eight (females) went home ill, one (female) was called to the deathbed of her mother, one (female) left to attend a school for the sighted, one (female) went home to assist in housework, one (female) went to see her sick father, and one (female) left on the removal of her parents from the Province.

Of the 104 pupils who were present at the end of the session, there were 55 males and 49 females.

The number of pupils in attendance at the opening on September 25th, 1907, was 112, as compared with 110 at the corresponding date in 1906, and 104 at the closing of the school term on June 19th, 1907. Of those in attendance at the close of the last term, 86 had returned, nine former pupils, who were not here at the close of last term, had come back, and seventeen new pupils had been enrolled. Of the nine described as former pupils, four were not in attendance during any part of the session of 1906-07. The absence of the eighteen who left in June but did not return in September is thus explained:—

One (male) died of pneumonia during the vacation; one (male) had become ineligible by reason of improved vision in his one eye; one (male) obtained a situation in a piano factory; one (male) had completed his course in tuning and was seeking a situation; three (males) were temporarily detained, and the absence of one (male) was unexplained. Four (females) stayed at home to assist in housework, one took a situation, the parents of two removed from the Province, and three were temporarily detained.

The ages of the new pupils are as follows:—

Males.	
Twenty-two years	1
Nineteen years	1
Seventeen years	1
Fifteen years	1
Thirteen years	2
Twelve years	2
Eleven years	2
Ten years	1
Nine years	1
Six years	2
Total	14

Females.	
Twenty-five years	1
Twenty-four years	1
Twenty years	1
Sixteen years	2
Fifteen years	2
Fourteen years	2
Thirteen years	1
Nine years	1
Eight years	1
Total females	12
Total males	14
Total males and females	26

The total registration in the official year, October 1st 1906, to September 30th, 1907, was 144—72 males and 72 females—against 147 in the preceding official year.

PUPILS REGISTERED IN SESSION 1906-7.

Name.	*Residence.*
Allison, Cameron	Vankleek Hill.
Boudreault, Joseph	Ottawa.
Brimacombe, James	Victoria Harbour.
Burgess, Lloyd	Princeton.
Cartwright, John	Toronto.
Chatelain, Jean	L'Orignal.
Clarke, Walter	Toronto.
Clemmett, Wilbert	Omemee.
Colby, Edward	Stratford.
Crew, William	Toronto.
Cundy, John	Arcola, Sask.
Daniel, Ovila	Big Point.
Derbyshire, Byron	Athens.
Duff, Charles	Banda.
Elnor, Harold	Toronto.
Fenton, Mills	Allenford.
Ferguson, John	Ophir.
Frayne, Orville	Forest.
Gagne, Ludger	Bonfield.
Goldie, Roy	Sarnia.
Golz, Gustav	Beausejour, Man.
Graham, Glen	Birnam.
Harvey, Walter	Toronto.
Hawken, Howard	Whitby.
Henderson, Richard	Ancaster.
Higgins, Thomas	Toronto.
Jackson, Alfred	Brantford.
Johnston, Harold	Brockville.
Kelland, Wilber	Kirkton.
Kelley, Byron	Oakville.
Kennedy, Thomas	Guelph.
Lavender, Charles	Dundas.
Lott, Albert	Brussels.
Marcotte, Cleophose	Mattawa.
McAvoy, Thomas	Bruce Mines.
McBride, Charles	Toronto.
McCaul, David	Hintonburgh.
McDonald, John	Alexandria.
McDonald, Norman	Mitchell.
McKinnon, Neil	Hamilton.
Mealing, Oliver	Brantford.
Nicolson, John	Bruce Mines.
Patterson, Clifford	Dundas.
Porte, Aquila	Aylmer.
Pride, Frank	Monerieff.
Rahmel, Harry	Berlin.
Raymond, Walter	Collingwood.
Ross, Leslie	French, Sask.
Sherman, Leonard	Fernie, B.C.
Simpson, Edward	Toronto.
Skinkle, George	Warkworth.
Stokes, George	Terra Cotta.
Thompson, Wm. G.	Toronto.
Treneer, Herbert	Kingston.
Valiant, Horace	Toronto.
Vance, Frank	Toronto.
West, Lionel	Galt.
White, Harry	Swansea.
Wisner, William	Schomberg.
Wilson, Roy	Kingston.
Yarocki, Harry	Garland, Man.

Name.	*Residence.*
Amyotte, Malvina	Bonfield.
Ash, Rachel	Sarnia.
Baldwin, Vashti	Niagara Falls.
Barr, Janet	Ancaster.
Bickerton, Gladys	Navan.
Branston, Ethel	Hamilton.
Bullock, Eva	Woodstock.
Capps, Bertha	Toronto.
Catling, Nellie	Goderich.
Conybeare, Nettie	Innerkip.
Cuneo, Mary	Davenport.
Davidovitz, Esther	Hamilton.
Davison, Winifred	Griersville.
Dean, Mabel	Stratford.
Deschenes, Louise	Bonfield.
Doherty, Marguerite	Peterborough.
Donaldson, Margaret	Lanark.
Duciaume, Eva	Rockland.
Elliott, Isabel	Elkhorn, Man.
Foster, Olive	Brantford.
Fox, Irene	Walkerville.
Fruiter, Pearl	London.
Hawley, Doris	Winnipeg, Man.
Heimrich, Gertrude	Berlin.
Hepburn, Alice	Port Elgin.
Hepburn, Harriet	Port Elgin.
James, Gertrude	Waterford.
Johnston, Charlotte	Guelph.
Kaufman, Blanche	Ridgetown.
Kight, Grace	Kemptville.
Leonard, Lily	Toronto.
Liggett, Margaret	Indian Head, Sask.
Liggett, Sarah	Indian Head, Sask.
Marsh, Mary	Holland Landing.
McEwen, Geraldine	Radisson, Sask.
McLeod, Lily	Webbwood.
McNutt, Ella	Warsaw.
McPherson, Helen	Arkona.
McQuade, Ethel	Stratford.
Miles, Mildred	Toronto.
Muntz, Eva	Vegreville, Alta.
Nevin, Pearl	Trent Bridge.
O'Reilly, Edith	Ottawa.
Patterson, Alma	Brantford.
Prosser, Angelina	Toronto.
Reamsbottom, Ruby	Haileybury.
Rennie, Lulu	Toronto.
Rooke, Emma	Dereham Centre.
Sells, Kathryn	Dubuque.
Smith, Laura	Dorchester.
Spicknell, Letitia	London Junction.
Sprengel, Marie	Harrow.
Squair, Ethel	Williamstown.
Stephenson, Muriel	Collingwood.
Stevens, Ethel	Peterborough.
Stickley, Alice	Toronto.
Thompson, Gladys	Toronto.
Thompson, Teresa	Hamilton.
Thomson, Anna V.	Ottawa.
Wilcox, Catharine	Toronto.
Wolsey, Esta	Toronto.
Wooldridge, Eleanor	Palmerston.

NEW PUPILS AT OPENING OF SESSION, 1907-08.

Name.	*Residence.*
Brown, Edward (re-adm.)	Ottawa.
Martel, Ubold	The Brook
McCutcheon, Roy	Cathcart.
Murray, Ancile	Goderich.
Ouellette, Arthur	Belle River.
Patterson, Clifford (re-ad)	Hamilton.
Paul, Leonard	Haileybury.
Paulson, Andrew	Wessington, Alta.
Porte, Aquila (re-ad)	Aylmer.
Simmons, Walter	Copper Cliff.
Smith, Joseph	London.
Steele, Frederick	Perth.
Wilkinson, Byron	Sarnia.
Wisner, William (re-ad)	Schomberg.
Bullock, Eva (re-ad.)	Woodstock.
Curry, Catharine (re-ad.)	Toronto.
Hewison, Betsy	Toronto.
McCannan, Beatrice (re-ad)	Kenora.
McQuade, Ethel (re-ad.)	Stratford.
Meehan, Laura	Toronto.
Munro, Isabel	Strathroy.
O'Neill, Mary	Hintonburgh.
Routley, Elsie	Toronto.
Sage, Edna (re-ad.)	Fanshawe.
Speers, Edith	Griswold, Man.
Stearns, Sarah	Ottawa.

In previous reports I have referred to the desirability of establishing (where necessary) and maintaining intimate and friendly relations between the school and its ex-pupils, for the good of both. Even the sighted young man or woman, on leaving school, often feels at a loss and would be the better for timely advice or assistance; to the blind person it is much more important. On the other side of the account, if we are to teach the blind children what they ought to know, we should know how and why blind men and women succeed or fail. I have obtained, during the year just ended, the addresses of many ex-pupils, and have sent reports and marked newspapers, as well as letters, to quite a number of them. The nature and intention of this movement is well set forth by the *Colorado Index*, which says:—

One of the most interesting and we believe one of the most far-reaching signs of the times, from the standpoint of results, appears to be rising gradually above the horizon. Not only the schools for the blind but other institutions are awakening to the fact that there ought to be a closer relation between the college or institution and its alumni. One college has established a "Bureau of Appointments" and at present is perfecting the registration of alumni desiring employment or change of position, and especially is it putting forth efforts to collect such data in regard to possible candidates for employment as will enable the college to answer inquiries from prospective employers intelligently and to recommend its graduates with assurance.

The secretary of the Bureau referred to says that "the Bureau (although relying upon the college for funds) has a legitimate place in the work of establishing and maintaining cordial and helpful relations between the alumni of the college and their alma mater, in creating in the minds of its graduates a strong impression that the college is looking after their interests not only immediately upon graduation, but whenever an opportunity of service offers."

The president of the Board of Managers of the New York State School for the Blind says that "In the education of the young blind the two immediate needs which stand out with greater prominence than any others are: First, an accurate and complete record of all the blind of the State, and, second, an equally complete classification as to age, sex, social condition, causes of blindness, previous training if any, and the degree to which they contribute to their own support." The president further states that "such a registry, too, would enable the school authorities to keep in closer touch with their graduates. The blind young man in the beginning of his career

may have such difficulty in getting established as to hopelessly discourage him at the very outset and lead him to give up trying, when a little bit of help and encouragement would have pulled him through."

Mr. Allen, Principal of the Overbrook School, says that "part of the work of our field officer is to visit former pupils, to report upon those who are doing well, to spur on those who should be succeeding and are not, and to find out what help we might give to enable our failures to get on. I have for years noticed this discouragement evident among many of our pupils in the senior year. This is due to the uncertainty they feel as to the future. If the school could be depended upon to stand back of its graduates, I believe the effect on the spirit of the school itself would be magical. Where there is hope and prospect, blind pupils work with a will, but where the uncertainty is too great, it crushes the spirit and the progress of all except the most sanguine or the most determined."

When we remember that a large per cent. of men who enter business fail at some time in their business careers, is it to be wondered at that the blind may fail also? Let us not expect more of our blind than we do of those who have all their faculties. Provision should be made in some way by which the blind graduate as he enters into real practical life may have the benefit of a strong, guiding and faithful hand at his command. Such assistance need not be of much expense to the State, and even if it were to considerable expense it would in many cases be more than repaid in that it would make productive rather than non-productive citizens.

A blind young lady, who left the Institution several years ago, and has been successful as a teacher, wrote me in August, suggesting the holding of a Convention of ex-pupils and the formation of an Association of graduates for mutual benefit. I would like to get the opinions of others on this proposition. As an indication of what might be done by such an Association, the following is presented: —

The Alumnae Association of the Massachusetts School was formed in 1884, the aim of which is:—

First, to render to the institution such systematic reports of the work of its graduates as shall enable it at any time to promptly ascertain the residence, address and occupation of any member of the association or any other statistics concerning her which may be desired.

Second, to carefully tabulate such experience and observations as shall seem of possible value to ourselves or to those who have not yet entered upon "the broad field of battle," and to labor earnestly to do our little and best to forward the work so grandly carried on by the school and its benefactors.

Third, to hold ourselves ready to render, collectively or individually, any service, great or small, which our *alma mater* may require at the hands of her grateful daughters.

The Association adopted a policy—to study the needs of blind women within the Association and without. In 1887, we find one woman reading a paper on sewing, its purpose to incite a proper regard for the care of clothes and to give practical suggestions of means by which blind girls may keep them in order. Another paper gives statistics concerning self-support among twenty-five blind women, only some of whom are members of the Association. About half the number are reported wholly self-supporting. All the others contribute more or less to their support.

In 1888, several members gave their experiences in different kinds of profitable work, as church music, massage, elocution and teaching. It was reported that many blind women living at home were able to sew by hand and machine; they could work beautifully in worsteds, silks and beads.

The questions to meet were:—How may their work be improved and broadened? What means can be devised for putting their wares upon the market?

In 1893 the advisability of establishing rooms for the sale of work was considered and referred to a committee. At the next annual meeting it was voted to establish an exchange in the salesroom of the institution in accordance with permission granted by Mr. Anagnos. The articles came from all grades of workers living in towns or villages near Boston and far from that centre. All work was carefully examined, only that of first-class quality was offered for sale. From a small beginning the receipts have increased to $1,433 for a year, and there are 77 consignors on the books who are not members of the Association.

The policy of keeping blind women in their homes, among the seeing, is much the happiest one that can be devised for the blind, and the best for the people at large; for any person who struggles bravely against odds is a blessing to the immediate community in which he lives.

Ex-Pupils.

Following are the names of pupils who attended this Institution between the years 1872 and 1906, with dates of entrance and leaving, address at time of registration and present address when the latter is known. In many cases the attendance was not continuous:—

Ainslie, James D., Edgeworth, 1873-83, present address, Leamington.
Airriess, Alfred G., Peterborough, 1887-88, 55 Weller street, Peterborough.
Alexander, John, Oshawa, 1886-87, dead.
Allen, William, Toronto, 1874-76, address unknown.
Anderson, James A., 1875-86, address Bearbrook.
Anderson, Louisa, Kingston, 1872-81, dead.
Anderson, Margaret, Hamilton, 1897-99.
Armstrong, Charles, Moorefield, 1878-89.
Armstrong, Charles G., Brantford, 1877-84, 251 Colborne street, Brantford.
Armstrong, George, 1875-81, address 55 Weller street, Peterborough.
Armstrong, Grace, Ingersoll, 1888-92.
Ashby, Lorne, Pontypool, 1889-98, dead.
Askew, Robert, Dresden, 1889-94, Dresden.
Atkinson, John, Streetsville, 1885-90, Streetsville.
Austen, Frank, Toronto, 1887-98, went to Austria.

Babb, Griselda, Mitchell, 1879-84, unknown.
Bain, Alexander, Balsam Hill, 1884-1902, Balsam Hill.
Bain, Margaret, Newmarket, 1893-1902, Mrs. W. J. Compton, 39 Regent street, Toronto.
Baker, George W. A., Oakville, 1872-76, Oakville.
Baldwin, John, Port Rowan, 1885-92; 1904-05, Mohawk.
Ballantyne, Robert, 1875-76, address Ballantyne's Station.
Ballard, Henry, Ashburn, 1873-81, Whitby.
Banfield, Thomas, Londonderry, N.S., 1876-83.
Barnard, Arthur, Hamilton, 1885-91, Hamilton.
Barnes, Lilian Daisy, Harriston, 1888-90, dead.
Barton, John, Toronto, 1878-87, dead.
Batt, Minnie, Toronto, 1877-81, dead.

Battersby, George, Brantford, 1894-95.
Baxter, Andrew, Galt, 1873-73.
Baxter, James, Dromore, 1873-79, dead.
Bayliss, Henry, Toronto, 1872-82, 21 Brookfield street, Toronto.
Beal, Lena, Brantford, 1890-91.
Beall, Arthur W., Peterborough, 1897-1900, 249 Park St., Peterborough.
Bearss, Ethel, Ingersoll, 1905-05, dead.
Beckstead, Addie, Beckstead, 1878-95, Elma.
Bedford, Herbert, Ameliasburg, 1891-98.
Bell, Gordon C., Mattawa, 1901-04, Mattawa.
Bell, Robert, Mattawa, 1901-05, Mattawa.
Bell-Smith, Amelia, Toronto, 1878-82, 336 Jarvis street, Toronto.
Benner, Sarah, Selkirk, 1877-78.
Bennett, Emily Lucille, Brantford, 1900-01, Mrs. John Moynihan, Guelph.
Bennett, Florence, Kingston, 1872-86, dead.
Berry, Walter, Toronto Junction, 1893-93.
Bezo, Albert, Napanee, 1879-91, W. A. Bazeau, 256 Ontario street, Kingston.
Birrell, Robert H., York Mills, 1894-94.
Bomberry, Elizabeth, Mitchell, 1881-85.
Boorman, Charles, Cayuga, 1886-90, Waterville, Oneida County, N.Y.
Booth, Addie L., Brockville, 1876-79.
Booth, George, Toronto, 1872-76, 188 Lisgar street, Toronto.
Booth, Sarah J., Bayfield, 1890-92, dead.
Bower, John, South Gower, 1878-79.
Bowie, Mary A., Ingersoll, 1873-86, Dundas.
Boyer, Frederick, Port Colborne, 1875-82, Port Colborne.
Boyle, Edward, Niagara, 1874-76.
Boynton, Roy, Port Huron, Mich., 1892-93.
Bradley, Wellington, Gananoque, 1874-85, Peterborough.
Bratt, Cora, Amherstburg, 1892-1900, dead.
Brient, John H., Michipicoten Harbor, 1901-02.
Britton, Mary, Bobcaygeon, 1875-81, Bobcaygeon.
Brock, Isaac, Wyevale, 1891-95, Wyevale.
Broom, Robert, 1872-82, Bradford, address unknown.
Brown, Augusta, Leamington, 1878-79.
Brown, James, Meaford, 1879-85, Meaford.
Brown, Mary J., Tyrone, 1874-81, dead.
Bruce, William, Goderich, 1878-89.
Bruce, William, Holstein, 1898-1903, Holstein.
Bruneau, Nelbert, North Bay, 1888-92, removed to Quebec.
Bryan, Charles H., Dyer's Bay, 1895-1901, Colpoy's Bay.
Bugg, Thomas, Toronto, 1883-94.
Burke, Albert Ernest, Toronto, 1891-1904, care Mason & Risch, Toronto.
Burke, Kate, Staffa, 1879-87, teacher O. I. B., Brantford.
Burley, Abigail, Ashburn, 1874-86.
Burley, Allen, Ashburn, 1874-81.
Burnett, William, Port Severn, 1896-1901, Beeton.
Burns, Joseph H., Minden, 1877-96, Minden.
Buswell, Emily, Hamilton, 1880-81.
Buswell, Frank, Hamilton, 1880-81.
Butchart, George, Cruickshanks, 1893-94.
Butters, Charles, Ohio, 1897-97.
Byers, David, Winchester, 1875-81, Flint Farm, Cannamore P. O.

Cain, Matilda, Oliver's Ferry, 1897-98.
Callaghan, Patrick, Granton, 1875-83.
Cameron, Angus, Alexandria, 1885-90, Alexandria.
Cameron, Annie, Algoma Mills, 1892-94.
Campbell, Frank H., Jordan, 1872-81, St. Catharines.
Campbell, Mary A., Keady, 1880-86.
Campbell, William, Keady, 1880-83.
Campbell, William, Aylmer, 1889-94.
Carnrite, Claude, Ameliasburg, 1902-05, Belleville.
Carr, Charles, Montreal, 1872-75, dead.
Carr, Elizabeth, Frankford, 1877-81.
Carr, George, Belleville, 1878-85.
Carroll, William H. R., Dutton, 1893-1902, Dutton.
Carruthers, Charles W., Avening, 1892-1904, Avening.
Carson, Adelia, Bowling Green, 1879-95, Bowling Green.
Charlton, Ethel, Lynedoch, 1878-90, 86 Madison Avenue, Toronto.
Chester, Jane, Scarborough Junction, 1879-82, Ellesmere.
Church, Almeda, Harcourt, 1878-81.
Clare, Dora, Hamilton or Ancaster, 1883-99.
Clark, Annie, Napanee, 1878-87, dead.
Clark, Edgar, Port Dalhousie, 1874-81.
Clark, Helen, Oshawa, 1886-93, Ellen G. Clark, McGregor St., Oshawa.
Clark, James, Woodstock, 1895-1906, Bible Training School, Toronto.
Cliff, Jesse, Port Perry, 1879-80.
Cochran, William, Ottawa, 1885-86.
Coleman, John, Kingston, 1879-86.
Coll, Gertrude, Ridgetown, 1901-06, 125 Collier Street, Toronto.
Collins, Charles, Toronto, 1887-88.
Collins, Daniel, Toronto, 1889-93.
Collins, Elizabeth, Stayner, 1878-83, care of C. L. Houston, Hancock, Michigan.
Collins, Maria A., Keswick, 1872-75, 23 North Street, Toronto.
Collins, Samuel, Cornwall, 1899-1902, 1491 St. Lawrence St., Montreal.
Collison, Nellie, Dixon's Corners, 1894-96, Iroquois.
Common, Annie, Galt, 1872-81, Galt.
Common, James, Galt, 1872-82, 252 King Street East, Toronto, care of Gerhard Heintzman, or 315 Gerrard Street.
Common, Mary, Galt, 1873-90, Galt.
Cook, Albert, Rosseau, 1904-06, care of A. A. Cook, Rosseau.
Cook, Benjamin, Toronto, 1883-85, 63 Oak Street, Toronto.
Cookson, Thomas, Toronto, 1895-99, Seaforth.
Cooper, Kate, Brampton, 1886-96, Brampton.
Coppin, George W., Toronto, 1885-97, Berlin, Germany.
Coté, Helen, Belleville, 1883-99, Belleville.
Cowan, Ida, Stoney Creek, 1878-89, Stoney Creek.
Cracknell, Emily M., Brocton, 1874-84.
Crawford, Elizabeth, Cornwall, 1889-94, Cornwall.
Crew, Benjamin, Markham, 1873-86, 69 Sydenham Street, Toronto.
Crockett, Marion, Montreal, 1896-1903, went to Perkins Institution. Boston.
Cronk, Freeman, Wellington, 1872-83, Wellington.
Cronk, Matura, Wellington, 1872-81, Visitors' Attendant, O. I. B., Brantford.
Cudhie, Charles, Toronto, 1872-77, dead.

Culbert, Irma Blanche, Lyn, 1898-1902, Lyn.
Curtis, Arthur, Mongolia, 1873-82, Essex.

Dale, Robert, Ottawa, 1875-76, dead.
Davis, William C., Hamilton, 1873-74.
Dayman, William H., London, 1883-88, London.
Deboe, Joseph, Belleville, 1875-80, Belleville.
Degeer, Rhoda, Mayhew's, 1877-84.
Denis, Adele, Belle River, 1890-93.
Dennis, John, Lindsay, 1878-82.
Derbyshire, Edward, Athens, 1896-1900, Athens.
Diamond, Edgar, Lansing, 1903-03, Lansing.
Digby, James, Brantford, 1890-91.
Doig, George, Peterborough, 1880-85.
Donaldson, Margaret, Lanark, 1903-07, care of J. W. Donaldson, Lanark.
Donkin, Walter, Dundas, 1894-97, Trades Instructor O.I.B., Brantford.
Donohue, Michael, Toronto, 1874-75.
Drake, Robert, Hornby, 1889-92.
Drummond, Thomas, Toronto, 1877-83.
Drury, Catharine, Hazel Brae, 1892-96, King Edward Hotel, Toronto.
Duncan, Leslie, Brantford, 1890-91.
Dunlap, Albert, Port Colborne, 1877-81.
Dunlap, Edward, Port Colborne, 1888-90.
Dunn, Margery, Port Colborne, 1883-84.
Dunn, Nelson J., Hornby, 1889-90.
Dunsmore, Howard, Columbus, 1899-95, went to Manitoba.
Dyce, Alexander, Cape Rich, 1887-99, 452 Euclid Avenue, Toronto, or care of Gourlay, Winter & Leeming.
Dyer, Mary, Harmony, 1880-86.

Eagen, Bertha, Toronto, 1875-88, 36 Madison Avenue, Toronto.
Eccleston, Allan, Hamilton, 1897-1904, 77 Canada Street, Hamilton.
Eddy, Mary E., Colborne, 1886-90, Cobourg.
Edwards, Isabella, Nanticoke, 1877-90, Mrs. Gracey, Nanticoke.
Ellerton, Thomas, Erin, 1884-89, Erin.
Elliott, Alpheus, Fairfield Plains, 1876-82, Brantford.
Elliott, Elizabeth, Mount Pleasant, 1873-74, dead.
Elliott, Frederick, Perrytown or Mount Pleasant, 1872-82, dead.
Elliott, Selena, Chesley, 1875-81.
Etwell, Annie, Uxbridge, 1898-99.

Fall, Albert, Toronto, 1902-06, 69 Lucas Street, Toronto.
Fenn, Henry, Ottawa, 1901-02, dead.
Ferguson, Enie, Toronto, 1896-1906, 28 Bredalbane Street, Toronto.
Ferguson, Melville, Coboconk, 1897-1902, went to U. S.
Field, Annie, Simcoe County, 1874-1905, Beeton.
Fields, Richard H., London, 1897-98.
File, Robert, Paris, 1893-97.
Filion, George, Ottawa, 1892-95, Coteau du Lac.
Fisher, Gertrude, Trafalgar, 1899-1902, Trafalgar.
Fitzgerald, Thomas, St. James, 1879-81, Clarence Street, London.
Fleming, Joseph, Hamilton, 1893-98, Hamilton.
Flintoff, George, Clinton, 1900-05, Clinton.

Forbes, Alexander, Montreal, 1896-1905, 15 St. James St., Montreal.
Forrest, Charles G., Winchester, 1893-94, Military Stores, Quebec.
Forrest, James, Niagara Falls, 1894-1903, Toronto.
Foster, Alfred, Toronto, 1889-93.
Fox, John, Deseronto, 1895-96, 270 Hayward Avenue, Rochester, N.Y.
Freethy, Thornton, North West Territory, 1902--02, returned to N.W.T.
Fry, John, Yarker, 1878-83, Box 652, Peterborough.

Gabourie, Blanche, Tweed, 1891-94, dead.
Gage, Ada, Ryckman's Corners, 1880-94, dead.
Gallagher, Francis, Bluevale, 1874-86.
Galvin, Elizabeth, Almonte, 1874-77, Box 150, Arnprior.
Garbutt, Wilbert H., Brampton, 1882-92, Brampton.
Garner, Sidney, Toronto, 1891-99, 1208 Bloor Street West, Toronto, or care of Mason & Risch.
Garson, Ann, Dromore, 1878-1883, Dromore.
Gassein, Theodore, Lindsay, 1894-1900, Lindsay.
Gates, Harry, Toronto, 1889-1901, 87 Claremont Street, Toronto.
Gates, William E., Toronto, 1872-73, gone to Australia.
Gauthier, Agnes, Windsor, 1886-94, Visitors' Attendant at Employment Institution for the Blind, Saginaw, W. S., Michigan.
Gauthier, Edward, Windsor, 1886-93.
Gauthier, Grace, Windsor, 1887-94.
Gentle, Edith Gertrude, Hamilton, 1899-99.
Getty, Hiram, Mount Brydges, 1874-77, dead.
Gibbons, Charlotte, St. Catharines, 1873-74.
Giddings, Jennie, Oakville, 1901-01, dead.
Gifford, Annie, Woodville, 1882-97, 135 Simcoe Street, Toronto.
Gifford, Harvey, Simcoe, 1889-1900, Simcoe.
Girardot, Anna, Sandwich, 1893-93.
Glass, Charles A., Sarnia, 1892-93.
Gluyas, William, Leamington, 1879-81.
Gorrie, Kate A., Cataraqui, 1884-86.
Gorrie, Samuel J., Cataraqui, 1884-87.
Gosslin, Annie, Bonfield, 1896-1901.
Gowers, Arthur, Windsor, 1895-1902, 29 Glengarry Avenue, Windsor.
Graham, David, Birnam, 1905-06, Birnam.
Graham, Mary, Fergus, 1872-81.
Granger, Charles H., Scarborough Junction, 1887-88.
Gray, Emily Mary, 1898-1900, Newmarket.
Gray, Finlay, Martintown, 1873-80, dead.
Gray, John, Britton, 1901-05, went to study osteopathy at Kirksville, Mo.
Green, Annie, Burtch, 1885-96, Mrs. Wm. Gould, Glencoe.
Green, Margaret, Toronto, 1902-05, 13 Close Avenue, Toronto.
Greene, Bernice E., Athens, 1899-1901.
Greenwood, Mary E., Pefferlaw, 1873-1881, Toronto.
Griffin, William, Basingstoke or Grassy's Corners, 1884-96.
Gulbrandsen, Lorenzo, Ottawa, 1888-99, 280 Dalhousie St., Ottawa.
Gunn, Harry, Woodstock, 1891-95, went to England.
Gunning, Edith Bertha, 1898-98, Toronto.

Haines, Kate, Hamilton, 1891-1902, Hensall.
Halford, Allanette, London, 1876-90, 442 Lincoln Avenue, Cleveland, O.

Hall, Anna, Amherstburg, 1901-06, Hillsdown, Alberta.
Hamilton, Emory, London, 1886-89, went to California.
Hancock, George, Napanee, 1885-89.
Hanmore, Catharine, Walkerton, 1884-86, dead.
Harcourt, R. J., London, 1888-90.
Harkness, William Wallace, Mallorytown, 1875-80, went to Northwest.
Harnden, Wilmot, Kingston, 1896-97.
Harris, Thomas, Madoc, 1873-75, Madoc.
Hart, Almeda, St. Thomas, 1883-1904, care of D. H. Gooding, St. Thomas.
Hartford, Eli,, Rondeau, 1880-81.
Hartford, Mabel, Leamington, 1883-87.
Hartford, Orlando, Rondeau, 1887-81, Blenheim.
Harvey, Annie May, Toronto, 1897-97, dead.
Hawkins, Margaret, Toronto, 1878-82, dead.
Hayes, Alvin, Alvinston, 1893-97, Alvinston.
Hayes, John, Luther, 1873-81.
Hays, Mary A., London, 1872-73.
Head, Peter J., Trowbridge, 1872-75.
Hearne, Elizabeth or Eva, Ethel P. O., 1874-81, dead.
Heimrich, Gertrude C., Berlin, 1906-06.
Helmkay, Charles, Toronto, 1899-99.
Helson, Louisa, Warkworth, 1875-79, dead.
Henderson, Louise, Hamilton, 1893-96.
Hennessey, Jane, Beamsville, 1886-92.
Hermon, Edward, Rednersville, 1881-92.
Hermon, Ridley, Rednersville, 1881-92, Cookstown.
Hicks, Mary, Hoard's Station, 1892-1905, Godolphin.
Higgins, Mary A., Toronto, 1894-1900, 51 Belmont Street, Toronto.
Hilker, George, Waterloo, 1896-98, Waterloo.
Hill, Isabella, Hill's Green, 1873-80, dead.
Hill, Mary, Hill's Green, 1873-80, dead.
Hinman, Annie A., Dundonald, 1873-85, Edville.
Hixon, Joseph, Mount Brydges, 1872-75, dead.
Hodge, Eliza, Mitchell, 1872-81, Mitchell.
Holt, Frank, Port Colborne, 1882-88, dead.
Hopkins, George, Toronto, 1888-90, 15 Sheridan Avenue, Toronto.
Hopper, Alfred, Eugenia, 1898-1904, Eugenia.
Hopper, George, Eugenia, 1892-1904, Eugenia.
Hopper, Mary Ann, Eugenia, 1886-92, Eugenia.
Horner, Florence, Paris, 1885-96, Burford.
Hotrum, James, 1874-80, Hamilton.
Houser, Edna, Toronto, 1905-06, Watervliet, Mich., Blind school at Lansing, Mich.
Howden, Thomas, Peterborough, 1885-88, Peterborough.
Howe, Harry, London, 1890-91.
Howson, David, Keene, 1875-79, dead.
Hoyt, Helen, Myrtle, 1873-78, 362 St. Clarens Avenue, Toronto.
Huffman, William, Grand Valley, 1888-1902, Grand Valley.
Hughes, John, Creighton Mine, Sudbury, 1903-06, Toronto.
Hughes, William, Toronto, 1891-94.
Hughes, William G., Peterborough, 1874-75.
Humphreys, Charles, Guelph, 1876-78.
Hunt, Hubert, Toronto, 1893-97.

Hunt, Ralph C., Toronto, 1903-04, 337 Leslie Street, Toronto.
Hunter, Agnes, Exeter, 1884-94, Mrs. Lammie, Hensall.
Hurley, Thomas, Lennoxville, Quebec, 1879-81.
Hurren, Martha A., Wilfrid, 1881-93, Mrs. Freeland, Bolsover.
Hurtubise, Alphonse, Ottawa, 1881-88, Music Store, Dalhousie Street, Ottawa.
Hyndman, Victoria, Exeter, 1888-91, dead.

Irvine, Frederick, London, 1878-79, dead.

Jardine, John E., 1888-91, Aberarder.
Jerrold, Cyril C., Toronto, 1897-1900, Cuba Villa, Paragon Grove, Surbiton, Surrey, England.
Jerrold, Wm. Robert C., Toronto, 1895-1901, went to England.
Johnson, Annie, Burford, 1877-82, Burford.
Johnson, Caroline, Hamilton, 1878-86.
Johnson, Frederick W., Islington, 1881-89.
Johnson, George, Trenton, 1888-89, dead.
Johnson, James E., Laskay or St. Catharines, 1876-83.
Johnston, Eva, Strathburn, 1899-1906, Glencoe.
Johnston, Frederick, Bluevale, 1894-1905, Bluevale.
Johnston, Thomas, Goderich, 1878-94.
Joice, Almeda, Demorestville, 1873-82.
Jones, Florence, Barrie, 1889-94.
Joyce, William H., Waterloo, 1895-99, Buffalo.
Judge, Emma, Brockville, 1897-98.

Kaiser, Albert J., Arthur, 1880-93, Bell Piano Factory, Guelph.
Kay, Grace, Brantford, 1896-1906, 76 Charlotte Street, Brantford.
Kelly, William F., Cobourg, 1874-80, Cobourg.
Kelly, William, Sarnia, 1878-85.
Kemp, Elgin, Bronte, 1873-75, dead.
Kennard, James, Winchester or Moorefield, 1872-86.
Kennedy, Chris. J., Brantford, 1887-90.
Kennedy, Kate, Powell, 1876-83, Dundas.
Kennedy, Mary, Bethany, 1874-85, Bethany.
Kenney, Charles J., Dunnville, 1885-95, Dunnville.
Kerr, John, Liskeard, 1882-85.
Kerr, John C., Perth, 1888-1901, dead.
Kerr, Minnie, Brantford, 1889-98, 6 Sheridan Street, Brantford.
Kersten, Bertha, London, 1875-79, Mrs. Anderson, Strathroy.
Kersten, Nina, London, 1872-73.
Ketchum, Annie, Dundonald, 1874-80, dead.
Kiel, William, Salem, 1873-78, Bell Piano Factory, Guelph.
Kiely, Caroline, Stoney Point, 1884-85.
Kimball, William, Toronto, 1898-1903, 96 Sherbourne St., Toronto.
King, Michael, South March, 1876-83.
Kingston, Walter, Moore, 1883-88.
Kirk, R. Charles, Tavistock, 1879-80.
Knapp, Erwin, Plum Hollow, 1875-79, dead.
Knapp, Ira, Harrow, 1890-98, Walkerville.
Knapp, Katherine, Scone, 1888-91, Scone.
Koch, John, Baden, 1877-78.

Koerber, Louis, Toronto, 1886-1901.
Konkle, John H., Beamsville, 1873-83, Beamsville.

Lamb, Margaret E., Delhi, 1884-85.
Lanthier, Edmund, Ottawa, 1889-91.
Latimer, Osborne, Stromness, 1883-86, Stromness.
Lauzon, Emile, Casselman, 1897-1903.
Lavery, Samuel, Hamilton, 1883-88, Hamilton.
Lawrie, Caroline, Oakdale, 1902-06, Oakdale.
Leaney, James B., Port Dover, 1874-85, Port Dover.
Lear, William T., Toronto, 1895-1900.
Leavitt, Charlotte, Cheapside, 1876-77.
Leblanc, Arcidas, Lefaivre, 1896-1903, Lefaivre, Ont.
Lecombe, Jasper, Lindsay, 1874-83.
Lee, Esther, Markham, 1881-87, 529 Manning Avenue, Toronto.
Lee, Henry, Mono Centre, 1877-84, Miami, Manitoba.
Lefler, William H., Simcoe, 1882-83.
Lemon, Alverston, Simcoe, 1873-81.
Lemon, Charles, Rockford, 1875-82, Brantford.
Lemon, John E., Simcoe, 1876-81.
Leppard, Aaron, Sharon, 1885-94.
Leppard, Askelon, Sharon, 1872-87, Sharon.
Leppard, Sandford, Sharon, 1872-83, care of Gourlay, Winter & Leeming, Toronto.
Leslie, Thomas, Highland Creek, 1879-80.
L'Esperance, Auguste, Belle River, 1889-95, Belle River.
L'Heureux, Charles, Windsor, 1904-05, Windsor.
Libby, Richard G., Toronto, 1899-1901.
Lidgett, Alice, Kinsale, 1888-1904, Kinsale.
Lillie, Ethel, Perth, 1890-91.
Little, David, Wellington, B.C., 1895-1905, 276 North Lisgar Street, Toronto.
Lloyd, Carl, Newmarket, 1881-93.
Lonie, Margaret, Brampton, 1882-85.
Longbottom, Margaretta, Toronto, 1878-79.
Loop, Enod, Aylmer, 1892-1902, Aylmer.
Louks or Loucks, Mary Agnes, Lynedoch, 1872-83, Mrs. (Capt.) Jordason, Central Avenue, Oswego, N.Y.
Love, Alfred, Woodstock, 1890-92, A. D. Love, 11 Veto Street, Grand Rapids, Mich.
Lovine, Ida, Tuscarora, 1876-83, dead.
Lowes, Walter, Brantford, 1885-92, Vendome Hotel, Brantford.
Lundy, Alberta L., Pine Orchard, 1893-93.
Luxton, Elizabeth, Luther, 1874-82.
Lwydd, Henry Charlewood, Huntsville, 1881-1903, Huntsville.
Lyon, Catharine, London, 1879-89.

Macdonald, Mary, Hamilton, 1894-1906, 405 Cannon Street East, Hamilton.
Mack, Charles, Toronto, 1895-1905.
Mackenzie, Clarence, Lyndhurst, 1892-95.
Madden, Adelbert, Kingston, 1886-90.
Malcolm, Jennie, Brantford, 1872-73.
Malcolm, Roddy, Mount Brydges, 1892-1904, Mount Brydges.

Malette, Frank, Brockville, 1889-90.
Mallory, Alva, Lindsay, 1874-82.
Mallory, Harriet, Yarmouth Centre, 1897-97.
Mann, Donald, Acton, 1891-92, Acton.
Mann, Elizabeth, Acton, 1889-98, dead.
Mann, Flora, Hamilton, 1876-81.
Mann, Mabel, Goderich, 1879-81.
Mann, Peter, Acton, 1888-89, dead.
Manton, T. Albert, Eglinton, 1894-95.
Marah, Mary, Hamilton, 1877-84.
Marantette, Susan, Windsor, 1895-1903, Box 479, Windsor
Marlatt, Jacob, Vienna, 1878-81.
Martin, Dosithe, Plantagenet, 1886-91, Lemieux, Ont.
Martin, Emma, Newbury, 1893-1901, Lambeth.
Martineau, Arthur, Ottawa, 1898-1901.
Mathieu, Odilon, Ottawa, 1890-97.
Matson, Hans, Gravenhurst, 1878-89, dead.
Matthews, Frank, Pelee Island, 1886-87.
Maughan, Jane, Owen Sound, 1887-90, Dayton, Ohio.
Maynard, Lorenzo, Rondeau, 1876-82.
McArthur, George, Toronto, 1887-98, 315 Gerrard St. East, Toronto.
McCallum, Elizabeth, Wallacetown, 1885-94, E. Macallum, Wallacetown.
McCarthy, Elizabeth, Toronto, 1878-83, dead.
McCarthy, Margaret, Ottawa, 1881-83, moved to U. S.
McCarthy, Michael, Berlin, 1873-75.
McConnell, William, Toronto, 1884-90.
McCreary, Edith, Toronto, 1894-1902, Mrs. Bert. Connaghan, Dovercourt Road, Toronto.
McDermand, Martha, Clear Creek, 1875-83, Mrs. Charles Lemon, Brantford.
McDermid, Robert, Nottawa, 1891-99, Nottawa.
McDonald, Annie, Napanee, 1874-79.
McDonald, Archibald, Chesley, 1875-79, 16 Mansfield Avenue, Toronto.
McDonald, Elizabeth, Chesley, 1877-85, Box 220, Chesley.
McDonald, Jessie (Fanny), Chesley, 1877-83, Box 220, Chesley.
McDonald, Jessie, Woodstock, 1873-82, Woodstock.
McDonald, Lewis, Brigden, 1889-91.
McDonald, Margaret, Cedar Springs, 1886-92.
McDonald, Mary, Toronto, 1889-92.
McDonald, Patrick, Berlin, 1886-90.
McDonnell, Charles, Hamilton, 1873-76.
McDowell, John, Ottawa, 1874-75.
McDowell, Ruth, Toronto, 1891-1902.
McEvoy, Jeremiah, Holstein, 1872-73.
McGivern, Bridget, Toronto, 1896-1900, Rochester.
McGrath, John, Orillia, 1880-87.
McIlmoyl, George, Bobcaygeon, 1879-85, Brantford.
McIntee, Price, Dunnville, 1886-91, dead.
McIntosh, Christina, Abingdon, 1876-87, 90 Garth Street, Hamilton.
McKim, William, Cataraqui, 1875-83, Newcombe's piano factory, Toronto.
McKinnon, Mary, Priceville or Dromore, 1880-95, Priceville.
McLaren, Margaret, Guelph, 1890-92, dead.

McLaughlin, Huldah, Newmarket, 1882-91, dead.
McLean, Alice Maud, Craighurst, 1898-98.
McLean, Margaret, Nottawa or Toronto, 1892-97.
McLellan, Kate, Hamilton, 1878-81.
McLennan, Ella, Toronto, 1890-95, went to Batavia school.
McLeod, George, Cornwall, 1887-90, Cornwall.
McMichael, Orpha, Waterford, 1873-73, dead.
McNabb, Charles, Collingwood, 1899-1900, dead.
McNally, Fred. J., Aurora, 1888-92, Aurora.
McNeil, Elizabeth, Strathroy, 1884-87, dead.
McNutt, Ella, Warsaw, 1905-06, care of Charles McNutt, Warsaw.
McPhater, Jessie, Clyde, 1888-1906, Clyde.
McPhie, Flora, Guelph, 1878-79.
McPhie, Mary, Pembroke, 1883-87, Pembroke.
McQuin, James, Brantford, 1872-83, 18 Sydenham St., Brantford.
McRae, Mary, Owen Sound, afterwards Toronto, 1901-05, 142 Jarvis St., Toronto.
McShane, Joseph, Hamilton, 1899-1900.
Medlow, Frederick, Ottawa, 1891-96, care of J. Orme & Son, Sparks St., Ottawa.
Metcalfe, Elizabeth, Toronto, 1880-81.
Miller, Charles H., Guelph, 1900-03, dead.
Miller, James, Whitevale, 1873-76.
Miller, Sarah, Brantford, 1899-1901, dead.
Mills, George, Hamilton, 1877-78.
Mitchell, James, Wolfe Island, 1882-85.
Mitchell, William, Peterborough, 1876-89, Box 709, Peterborough.
Mitcheltree, Thomas, London, 1877-86, 28 Alexander St., West London.
Montgomery, John W., Pembroke, 1902-03.
Moodie, Louisa, Canfield, 1893-1900, Canfield.
Moreland, Alfred, Ottawa, 1881-86, care of Orme & Son, Ottawa.
Morgan, Henry F., Bayfield, 1872-74, 636 Oxford St., Toronto, or Midland, Ont.
Morrison, William J., Toronto, 1893-97.
Moses, Eva, Waverley, 1880-86, Saurin, Ont.
Mosser, Samuel, Salem, 1875-81.
Moulton, Charles, Portland, 1890-95, dead.
Muir, Jane, Port Elgin, 1872-90, Port Elgin.
Muirhead, Janet, Midland, 1878-81, Vasey.
Mulholland, Samuel, Hamilton, 1897-98.
Mulligan, Annie, Cobden, 1880-1905, Perth.
Mulvahill, Kate, Arnprior, 1875-97.
Mundy, Roy, Woodstock, afterward Harcourt, 1900-05, went to England.
Munro, William, Belleville or Foxboro, 1879-85, dead.
Murray, Bena, Woodstock, 1886-87, dead.
Murray, Catharine Ross, Woodstock, 1901-03, Woodstock.
Murray, John A., Allenford, 1881-94.
Murray, Letitia, Allenford, 1884-1900, 44 Darling St., Brantford.
Mustard, Robert, Mongolia, 1874-75.
Myers, Howard, Toronto, 1902-02.

Nagura, Frederick, Pembroke, 1878-87.
Nagura, John, Pembroke, 1878-83, dead.

Nagura, Martin, Pembroke, 1878-89, dead.
Nagura, Mary, Pembroke, 1889-1905, Germanicus.
Nash, Alice, Bothwell, 1879-97.
Nelems, Ida, Chatham, 1877-88.
Nelles, J. Edwin, Paris, 1879-86.
Nesbitt, Elizabeth, Walkerton, 1874-89, Walkerton.
Nevins, Lucy, Kingston, 1885-86, 287 Keele St., Toronto Junction.
Newlands, Thomas, Toronto, 1887-90.
Newton, Eva, Toronto, 1896-97.
Nodwell, William, Hillsburgh, 1872-75, 57 Kempt Road, Halifax, N.S.
Norris, Charles, Mill Point, 1874-76.
Norris, George, Omemee, 1878-88, Omemee.
North, Milton, Appledore, 1873-83, 303 Michigan Ave. East, Lansing, Mich.

Oakes, Adrian, Inwood, 1904-04.
O'Brien, Elizabeth, Toronto, 1905-06.
O'Camb, Allen, Belleville, 1873-85.
Oill, Neville, St. Thomas, 1886-95, dead.
O'Neill, Mary, Bogart or Stoco, 1883-93.
O'Reilly, Catharine, Mitchell, 1876-81.
Overholt, Mary, Rosedene, 1884-85, dead.

Painter, Walter G., Toronto, 1899-1900.
Park, Robert J., Red Wing, 1897-1901, 100 Bloor St. West, Toronto.
Parker, Agnes, Hamilton, 1884-89.
Parkes, Thomas E., Rye, Muskoka, 1881-82.
Paton, David, Colpoy's Bay, 1885-88, Adamsville.
Pattison, Ambrose J., Clinton, 1890-92.
Pattison, Maud, Clinton, 1884-89, dead.
Pender, Peter, Komoka, 1898-1903, dead.
Pennock, John, Brockville, 1880-87.
Peters, Robert, Brooke, 1893-97, Brooke.
Peterson, Ethel, Trenton, 1904-05, Trenton.
Petrie, Hamilton, Ayr, 1872-77, dead.
Pilkie, Alice, Chatham, 1875-81.
Pincombe, Robert, St. Thomas, 1882-92, 42 East Street, St. Thomas.
Place, Isabella, Algonquin, 1888-93, Algonquin.
Pode, Emma, Clinton, 1876-89, Clinton.
Points, J. H. Edward, Chatham, 1893-1901, Chatham.
Pollard, Henry, Invermay, 1875-76.
Polley, J. P. M. (Keith), Simcoe, 1900-1903.
Ponting, Hester, Courtland, 1889-1906, Courtland.
Porter, Jane, Brantford, 1872-74.
Potts, Harriet, Allandale, 1881-90.
Pratt, Dora, Kingston, 1889-92.
Pratt, Emily, Reading, 1873-81, care of John Wheeler, Clarksburg.
Pratt, Thomas, Reading, 1884-88, dead.
Pretty, Isaac D., Ashton, 1884-90, Ashton.
Prittie, Caroline, Widder, 1880-97.
Prittie, Emma, Parkhill, 1880-83, Mrs. James Hendrie, Keyser.
Prittie, Francis, Parkhill, 1880-89, Keyser.
Prittie, Mary, Widder, 1883-1901, Keyser.
Prittie, Samuel, Widder, 1882-94, Keyser.

Prittie, Walter, Widder, 1886-99, dead.
Purdy, Martha, Toronto, 1874-81, dead.
Purser, John, Cobourg, 1904-05.

Quick, Alice, Gravenhurst, 1898-1902, Hamilton.
Quick, Laura, Kingsville, 1879-1904, Pelee Island North.
Quinlan, Cornelius, Stratford, 1884-92, dead.
Quinn, Elizabeth, Richmond Hill, 1887-99, 78 Davenport Road, Toronto.

Radley, Maud, Hamilton, 1897-98.
Rafter, Rixon, Arthur, 1891-1902, Queen's College, Kingston.
Rake, Annie, Woodstock, 1897-1900, Woodstock.
Randall, William H., Alvinston, 1873-75.
Rapelje, Sarah, Burford, 1872-74.
Ratcliffe, Walter, Port Hope, 1897-99, 233 Nelson Street, Brantford.
Raught, Permelia, Inkerman, 1872-81, Hainesville.
Raymond, William, Hounslow, England, 1873-77, Postmaster, Brantford.
Rayner, Walter, Brantford, 1892-92.
Redman, Florence, Kleinburg or Laskay, 1888-1900, dead.
Reilly, Mollie Holmes, St. Catharines, 1895-97.
Reinhart, Aloysius, Mildmay, 1898-1904, Mildmay.
Rennick, Thomas J., Toronto, 1886-98, 292 Jones Avenue, Toronto.
Richards, Philip B., London, 1872-84, 134 Oxford St., London.
Richards, William, Copetown, 1872-82, Copetown.
Richardson, Laura, Hamilton, 1898-1901.
Richardson, Margaret, Hamilton, 1898-1901.
Richmond, Sarah A., Parkhill, 1872-1881, moved to Michigan.
Rigney, Catharine, Toronto, 1880-85, 331 Queen St. East, Toronto.
Ritzer, Michael, Windsor, 1903-06, Waterloo, Ont.
Roberts, Fanny, London, 1884-1900, Mrs. Fanny Brothers, Strathroy.
Roberts, Roger W., Stratford, 1872-76, Stratford.
Robertson, Guy Carleton, Brantford, 1900-1902, moved to Michigan, attended Lansing school.
Robertson, Margaretta, Meaford, 1889-96.
Robinson, A. G., Winnipeg, 1897-98.
Robinson, Bertram, Markham, 1883-90, Markham.
Robinson, John E., Wilkesport, 1898-1901, went to Detroit.
Robinson, Kate, Toronto, 1883-85.
Robinson, William, Chatham, 1879-83, dead.
Rogers, Alice, Toronto, 1874-86, 86 Trinity St., Toronto.
Rose, Artemus, Summerstown, 1890-94, Summerstown.
Rose, Charles J., Iroquois, 1872-84, Algonquin.
Rose, Florence, Dundas, 1905-05.
Rose, Thomas, Summerstown, 1891-94, Summerstown.
Rouillier, Wilfrid, Belle River, 1899-1900.
Rowe, George, Kinloss, 1874-79, dead.
Rowe, Maria, North Douro, 1874-83, dead.
Rowles, Edith, Port Hope or Petrolia, 1880-88, went to England.
Rumley, Elizabeth, Durham, 1876-78.
Rusland, Kate, Little Britain, 1889-96, Little Britain.
Ryan, Kate, Toronto, 1890-92, dead.
Ryan, William, Trenton, 1902-05, 652 King St. West, Toronto.

Sager, Floyd, Peterborough, 1905-05, 1196 Hurtle Avenue, Buffalo, or Batavia Institution.
Sansome, Charles, London, 1884-87.
Sargent, Francis, Stratford, 1884-91.
Saunders, Bruce, Brantford, 1898-1905, 42 Spring St., Brantford.
Sauvé, Elizabeth, Belle River, 1880-82, dead.
Sauvé, James, Ottawa, 1885-92.
Sauvé, Matilda, Belle River, 1895-1905, Belle River.
Sauvé, Napoleon, Ottawa, 1894-1900.
Scott, Margaret, London, 1898-98, 108 Askin St., London.
Scott, Rachel, McDonald's Corners, 1900-05, McDonald's Corners.
Scott, Robert, Beachburg, 1878-86, R. H. Scott, Beachburg.
Scrimshaw, Jane, Madoc, 1882-83.
Shannon, Stanley, Brantford, 1902-03, Chatham.
Sharp, Minnie, Frankford, 1875-76.
Sharp, Sarah A., Teeswater, 1872-81, Teeswater.
Shaughnessy, James E., Barrie., 1876-85, 235 Bellwood Avenue, or Newcombe piano factory, Toronto.
Shaw, Mary Ann, Chatham, 1879-85.
Shaw, George R., London, 1874-79, General Hospital, Toronto.
Shepherd, Alice, Toronto, 1878-85, dead.
Shepherd, George, Hamilton, 1878-96, care Mason & Risch, Toronto.
Sherritt, John Roy, Harpley, 1899-1900, Harpley.
Shillington, Lloyd, Blenheim, 1905-05, Blenheim.
Shillington, Margaret, Harley, 1897-1902, Harley.
Shouisseler, Louisa, Brantford, 1872-81.
Shunk, Charlotte, Bay View, 1877-83, Bay View.
Simmons, Richard, Brantford, 1901-04, 97 Oxford St., Brantford.
Simpson, Mary, London, 1876-77.
Simpson, Samuel, Dickens, 1876-83, dead.
Sims, Elizabeth (Lily), Moosomin, N.W.T., 1888-89.
Size, Alice Eleanor, Ingersoll, 1894-99, 48 Markham St., Toronto.
Sizeland, Bertha, Meaford or Toronto, 1885-99, Bertha Tennant, 88 Markham St., Toronto.
Sluggatt, William, Oakwood, 1890-93.
Small, Edward, Elimville, 1878-79.
Smith, Edmund, Whitefish, Algoma, 1893-97.
Smith, F. J., St. Clair Siding, 1888-89.
Smith, Jane, Guelph, 1878-81.
Smith, John, Toronto, 1893-94, dead.
Smith, Laura, Dorchester, 1900-07, Dorchester.
Smith, Oliver, Hamilton, 1886-88.
Soanes, Frederick, Peterborough, 1878-82.
Spencer, Edwin, Toronto, 1888-91.
Stabbach, Maud, Beaverton, 1887-1902, Beaverton.
Stainton, J. B., Simcoe, 1888-89.
Stanford, Henry, Hamilton, 1877-86.
Staunton, Jabez, Elgin, 1874-76, J. B. Staunton, Newboro.
St. Denis, Thomas, Ottawa, 1884-89, dead.
Steele, Hester A., Harrowsmith, 1873-74.
Stephens, Edith, Hamilton, 1903-03.
Stephenson, Mrs., Brantford, 1885-89, dead.
Stewart, Elizabeth, Wellandport, 1873-82, dead.
Stewart, Elwyn B., Paris, 1891-96, Paris.

Stewart, John, Seaforth, 1881-88, dead.
Stewart, Robert, Woodburn, 1873-83, R. H. Stewart, Binbrook.
Stewart, William, Williamstown, 1880-81, Box 31, Lancaster, Ont.
St. John, Henry, Sunderland, 1887-92, Sunderland.
Strohmayr, John, Toronto, 1892-93.
Strong, Elizabeth, Woodslee, 1884-93, Woodslee.
Strong, Mary, Belle River, 1881-97.
Stuart, James, Toronto, 1891-97, Weston Hospital.
Sullivan, Andrew, Spaffordton, 1882-91, Kingston.
Sullivan, Kate, Dundas, 1878-87.
Sullivan, Margaret, Port Colborne, 1878-83, Mrs. W. C. Small, 212 Niagara St., Niagara Falls, N.Y.
Swetman, Maud, Tillsonburg, 1901-06, Tillsonburg.
Swift, Sherman, Petrolea, 1890-95, 21 St. Famille St., Montreal.
Switzer, Minnie, Kingslake or Forest, 1885-92.
Syret, Charlotte, St. Thomas, 1873-77.

Tang, Jane, Nosbonsing, 1894-1901, Bonfield.
Taylor, Annie J., Todmorden or Toronto, 1890-92, went to England.
Taylor, Emma, Birmingham, Eng., 1878-79, London, Ont.
Taylor, John A., Norwood, 1889-96, Cavanville.
Taylor, Seymour J., Todmorden, 1885-92.
Teets, Cook, Flesherton, 1874-75.
Thom, Alison, Palmerston, 1873-74.
Thomas, Leslie, Branchton, 1896-1906.
Thompson, Hannah, Guelph, 1879-80.
Thompson, Isabella L., Toronto, 1898-99.
Thompson, James, Toronto, 1889-93, 130 Dunn Avenue, Toronto.
Thompson, Joseph, Toronto, 1888-96.
Thompson, Omar, Glen Stewart, 1875-76.
Thompson, William, Ottawa, 1901-06, 300 Sparks St., Ottawa.
Thornton, Jane A., Clinton, 1872-85, Portage la Prairie, Manitoba.
Thrower, Elizabeth, Delaware, 1874-81, dead.
Thurlow, Alfred, Toronto, 1887-1902, 2 Cameron St., Toronto.
Tilbury, Charles, Dundas, 1874-81, Dundas.
Tinkiss, James H., Manitowaning, 1898-1901, dead.
Townsend, Elmore, Toronto, 1889-90.
Tracy, Agnes, Minesing, 1882-83.
Tracy, William J., Kingston, 1872-85, 11 Colborne St., Kingston.
Treneer, Frederick, Kingston, 1887-1904, Stanley Terrace, Kingston.
Treneer, William J., Kingston, 1883-1900, Stanley Terrace, Kingston.
Tyson, John, Middleport, 1872-88, Cainsville.

Underhill, Elizabeth, Brougham, 1877-78.

Wade, Anna L., Hamilton, 1872-83, Mrs. Harry Bayliss, 21 Brookfield St., Toronto.
Waldroff, Alexander, Newington, 1886-91.
Waldroff, W. H., Newington, 1886-91, Newington.
Walker, John M., Raglan, 1872-72, dead.
Wallace, Charles, Brantford, 1879-86, west to U. S.
Walt, Augustus O., Consecon, 1891-94, Consecon.
Wark, Samuel, Forresters' Falls, 1878-88.
Waterson, Robert, Newmarket, 1886-95.

Watson, Barbara M., Colinville, 1884-88, dead.
Watson, George F., Force's Corners, 1876-76.
Watson, Rachel, Greenbank, 1874-82, Mrs. George Booth, 188 Lisgar St., Toronto.
Webster, Frederick, Brantford, 1885-88.
Webster, Thomas, Brantford, 1892-1901.
Weller, Rose, St. Thomas, 1891-98.
Wells, William J., Brockville, 1879-93, dead.
Welz, George B., Berlin, 1895-99, Box 568, Berlin.
Weston, Winifred, Weston, 1897-97, dead.
White, Rosa E., Amigari, 1894-98, Box 498, Calgary, Alberta.
White, Thomas, London, 1875-76, London.
Wight, Sarah C., Trenton, 1874-79, Box 259, Trenton.
Wigle, Sylvanus, Ruthven, 1872-83, Kingsville.
Wilkie, John, St. Thomas, 1887-91, went to England.
Wilkinson, Quita, Sarnia, 1900-04, Sarnia.
Williams, Ernest, Toronto, 1884-91, dead.
Williams, Mary, Toronto, 1895-1905, 7 Clifford St., Toronto.
Williamson, Sarah, Kohler, 1877-97, Kohler.
Wilson, Isabella, Yorkville, 1882-85, Brookdale, Quebec.
Wilson, John G., Buckhorn, 1876-83, dead.
Wilson, Mary, Honeywood, 1875-82, dead.
Wilson, William, Guelph, 1883-95, Helena Avenue, Wychwood Park.
Winter, Edward, Hamilton, 1879-81.
Wise, Ketura, Weston, 1880-82.
Withers, Albert C., Fonthill, 1895-98.
Wood, James, Cashel, 1885-90.
Woodley, Susan, Clarence, 1875-76, Mrs. Susan McCabe, 13 Kenney St., Ottawa.
Woolcock, William, Strathroy, 1873-74.
Wooley, Roy, Springfield, 1905-05, Springfield.
Wray, Beatrice, Toronto, 1896-1904, 1120 Bathurst St., Toronto.
Wright, Ella, Harrow, 1891-98, Harrow.
Wright, Florence, Harrow, 1891-1902, Harrow.
Wright, Margaret, Brantford, 1901-03, Brantford.

Yates, Catharine, Guelph, 1878-84.
Yates, Jane, Peterborough, 1874-79, dead.
Yost, Lena, Hespeler, 1878-81.
Young, Charles, Chalk River, 1877-84, Calgary, Alberta.
Young, Margaret (Maud), Toronto, 1892-1903, Maud Young, 20 Grove Avenue, Toronto.
Young, Norman, Grand Mere, Quebec, 1900-1903, 276 Lisgar Street North, Toronto.
Youngs, Albert, Ridgetown, 1898-1905, care of R. W. Youngs, St. Thomas.

Zavitz, Homer, Orwell, 1874-75.
Zimmerman, Louis, London, 1883-84.

To all those whose addresses are known, copies of this report will be sent, and some of those who receive it may be able to send me the present addresses of others, so as to extend the circle. We have not yet a field officer, nor a permanent commission, to keep track of old pupils and find

new ones, but the spirit of co-operation exists, and I hope, with the assistance of those already located, to have ere long a practically complete record of all who have gone out from the O. I. B. since its establishment in 1872.

The ex-pupils will assist me very much by promptly notifying me of any changes in their addresses. I need the street and house number of those who live in cities. In acknowledging the receipt of reports, etc., any information about how they or other blind people are getting along, or any suggestions of things that might be done for the good of the blind, will be very welcome.

Entertainments.

In order that all the pupils should have experience in appearing before an audience, a series of weekly entertainments in the Music Hall was inaugurated in the beginning of the session, and kept up until the examinations began near the close of the scholastic year. At these five girls and five boys were called upon to supply each programme, in the order in which their names appeared on the roll, and there were no failures to respond. Generally there was a good variety of instrumental music, songs, recitations and speeches, the pupils being allowed to make their own selections, the younger ones getting such help in preparation as they required. Sometimes friends from the city were present, but oftener the audiences were composed entirely of the pupils and teachers. These little concerts were very enjoyable, as well as highly beneficial to those who took part.

Hallowe'en Concert.

Instead of the customary Hallowe'en Concert by the pupils, the choir of the Wellington Street Methodist Church, under the leadership of Mr. Thomas Darwen, and assisted by the Darwen Orchestra, gave a fine concert in the Music Hall on the evening of October 31st. The programme began with an organ solo by Mr. Darwen and ended with "The Heavens are Telling" by the choir and orchestra; other choral numbers being Handel's "And the Glory," "The Singers," and "The Slumber Song." Among the soloists were Miss Alice Bloxam, who sang "The Island of Dreams" very prettily; Miss Gladys Garvin in "I Know a Lane in Springtime"; Miss Florence Mustizer in "Love Me and the World is Mine"; Miss Nellie Thornton in "Good-night, Beloved"; Mr. F. Houghton in "The Old Flag," and Master John Howarth in "His Majesty the King," all of whom won the applause of the audience. Miss Mabel Limburg and Miss Emma Burns in their duet "My Faith Looks up to Thee," and Misses Mabel and Matilda Limburg in "Come, Holy Spirit" displayed their fine voices to advantage, and Miss E. Buckley of Paris gave an admirable rendition of Raff's "Polka de la Reine," on the Steinway Grand piano. Miss Jessie Imlach's recitations, of which there were three on the programme, were greatly enjoyed, especially by the younger pupils. Principal Gardiner thanked the visitors for their splendid entertainment and invited them to the teachers' parlor, where they found an opportunity to become acquainted with the staff and partake of light refreshments.

Visitors from Grace Church.

The Anglican Young People's Association of Grace Church paid a visit to the Institution for the Blind on the evening of November 29th and entertained the pupils with a delighful programme. The first item was a debate, "Resolved that the unmarried man is happier than the married man."

Affirmative, Messrs. G. Lake, A. Ginn, F. J. Clark; negative, Messrs. W. Hughes, W. Davenport, W. McCready. No decision was given. President Mellor occupied the chair. After the debate Rev. Dr. Mackenzie took the chair and the following numbers were given:—Piano solo, Miss E. Burr; dialogue, Misses Durnford and Hornby; vocal solo, E. Lindsay; recitation, A. Pickles; dialogue, Messrs. Rolfe and Parsons; song, W. McCready; recitation, Miss C. Davies; vocal solo, Miss M. Raymond; organ selection, Mr. Percy Owen. Mr. Gardiner, on behalf of the pupils, thanked the young people for their entertainment. After the programme a sociable hour was spent in the teachers' parlor, where refreshments were served.

Entertainments such as the two above described are among the most pleasant to the staff, and most useful to the pupils, of any that are given in the Institution, and our friends in the city are always very kind in accepting invitations to visit us; but the measles epidemic and other causes necessitated the limitation of the usual courtesies in this respect.

Christmas Concert.

The Brantford papers reported that the Music Hall of the Ontario Institution for the Blind was prettily decorated on the evening of December 20th, on the occasion of the Christmas Concert, which precedes the dispersal of about half the pupils, who go to their homes to spend the holidays, the others remaining at the Institution. As usual at O. I. B. entertainments, the hall was well filled, but by bringing in extra chairs from the dining rooms all were comfortably seated. Principal Gardiner spoke very briefly, mentioning that the enrollment of pupils was 118, of whom three had been obliged to retire on account of illness or domestic reasons, leaving 115 in actual attendance. He could commend the conduct and industry of all during the term, and he expected them to give a good account of themselves in their respective performances.

A pleasing feature of the programme was the number of juvenile participants. Miss Lee, the Kindergarten teacher, had trained a class of very little boys and girls to sing a couple of pieces, which they did with great spirit. Their selections were "The Sleighing Song," "The Dance of the Rainbow Fairies," and "The Tea-Kettle," and the children who took part were Muriel Stephenson, Gladys Bickerton, Kathryn Sells, Teresa Thompson, Roy Goldie, Frank Vance, Leonard Sherman, Wilbert Clemmett, Neil McKinnon, Ludger Gagné, Mills Fenton, Thomas Higgins, Aquila Porte and Clifford Patterson, half of whom are in their first term at the school. The little folks had a share in the recitations, too, Roy Goldie disclosing "The Secret of Happiness" as being to "Do Something for Somebody Quick," while Vashti Baldwin told about "Dicky's Christmas." Among the older reciters were Miss Margaret Liggett, from Indian Head, Sask., whose story of "The News-boy's Debt" was admirably told; John McDonald, whose imitation of the horse auctioneer selling a piano was very funny; Nellie Catling, who described "Swipsey's Christmas Dinner" and Isabel Elliott, whose rendition of "The Station-Master's Story" showed remarkable elocutionary talent and a marvelous memory. Miss Walsh, to whose capable hands the training of these reciters had been committed, had every reason to be proud of the results of her labors.

The musical part of the programme was of a varied nature, but the different parts harmonized in such a way as to increase the bright effect of the whole. The opening organ solo, Wely's "Offertoire in E Flat," played by Miss Louise Deschenes, showed the young lady to be an organist of

unusual merit, with splendid control over her instrument; in his song, Allitsen's "There's a Land," Mr. Joseph Boudreault, though suffering from a severe cold, acquitted himself with great credit, singing with splendid spirit and power.

The choral class contributed two numbers, Hauptmann's "The Night Now is Falling," a song of a quiet nature, and West's "Sir Harold the Hunter." Both were rendered with the attention to attack, intonation and expression which always characterizes the singing of this chorus, but the latter number seemed to even outstrip former records in some of these regards.

Master Charles Duff appeared at the organ in Best's "March for a Festival," and both in this number and as the organist in the final overture played in a manner which surprised even those familiar with his work. This lad of only fourteen years has frequently played entire church services, and if he continues as he has begun should make a name to bring pride to himself and to the O. I. B.

The only piano solo of the evening was the "Valse de Concert" of Wieniawski, played by Miss Eva Bullock, who showed herself possessed of a splendid technique and a most intelligent conception of the musical beauties of the very difficult selection. Mr. John Nicolson, in his singing of "A Rose in Heaven," by Trotére, won a real triumph, and but for the rigid rule against encores would certainly have been recalled. Mr. Nicolson's voice is a high baritone of great power and the vigor of his singing immediately wins the favor of his audience.

There were two concerted numbers in the evening's programme. Chaminade's "Air de Ballet" was played by seven boys, Thomas Kennedy, Cameron Allison, Horace Valiant, George Skinkle, Charles Duff and Charles Lavender at the three pianos and Herbert Treneer as the efficient organist. The other number was Weber's "Overture to 'Der Freischutz,' " in which the pianos were played by six girls, Grace Kight, Louise Deschenes, Eva Bullock, Eleanor Wooldridge, Alice Stickley and Victoria Thomson, with Charles Duff as organist. Both of these numbers were notable for the precision with which the movements were attacked, and the ensemble proved to be of a very high order. As a whole, the musical numbers were of a degree of excellence which upheld the traditions of the school, and high praise is due to Mr. Humphries, Miss Moore and Miss Harrington, the teachers who so well accomplished the arduous task of training the performers.

At the close of the concert the audience joined in singing "God Save the King."

Christmas Tree.

On the evening of December 26th the pupils who were spending the holidays in the Institution enjoyed an informal entertainment with recitations by Lily McLeod, Leonard Sherman, Harriet Hepburn, Roy Goldie, Ethel Squair, Howard Hawken, Marguerite Doherty, Leslie Ross, Marie Sprengel, Gladys Bickerton; songs by Harriet Hepburn, Ethel Squair, Isabel Elliott, John McDonald, Roy Goldie, David McCaul, Joseph Boudreault, Gustav Golz, Jean Chatelain, Wilbert Clemmett and John Nicolson; instrumental selections by Walter Raymond, Charles McBride, Cleophose Marcotte and Horace Valiant. During an interlude bags of fruit and candy were passed around and the gifts on the tree were distributed, Mr. Ramsay, the Supervisor of Boys, acting the part of Santa Claus.

Willow Concert.

The city papers of March 6th, 1907, reported that the boys at the Institution for the Blind finished the willow-peeling on the preceding Saturday, and in accordance with custom they and the other pupils were treated to an oyster supper, followed by a concert programme. All seemed to enjoy the bivalves, and although no outside talent had been secured for the concert, there was a nice variety of performance, including recitations by Mary Cuneo and Winifred Davison, songs by Wilbert Clemmett, John McDonald, Grace Kight; a violin solo by Louise Deschenes, and several piano solos. Mr. George Lambden, the superintendent of the workshop, being called upon by the Principal to address the pupils, expressed his satisfaction with the spirit and industry of those who had been working under him. Though the hours were short, so as not to conflict with the literary and musical work of the school, there were sometimes as many as forty boys in the shop at once, and they were not only industrious but orderly. They had worked like Trojans to dispose of the three tons and over of willow, and now they would find more time for the cane-seating, hammock-making and some other useful industries which he had in view. Two of the pupils, Harry Rahmel and Albert Lott, asked leave to express their thanks for the interest that Mr. Lambden had taken in them and the other boys, as shown in the improved conditions in the shop, his patient teaching and uniform kindness. Frequent applause greeted the mention of Mr. Lambden's name.

On April 15th the Principal talked to the officers, teachers and pupils in the Music Hall for two hours, giving a detailed account of his recent visit to the schools for the blind at Lansing, Mich., and Janesville, Wis., and to the shops for the blind at Milwaukee, Wis., and Saginaw, Mich.

Boys' Concert.

On April 16th a fine concert was given in the Music Hall by the Boys' Chorus. Besides the usual audience of their fellow pupils, a large number of friends from the city attended the concert and showed their appreciation of the excellent and varied programme in the most enthusiastic manner. The various numbers were most heartily applauded, and many of the performers were recalled. The programme was entirely arranged and prepared by the boys themselves, and the greatest credit is due to them for the manner in which it was carried out. Mr. Wickens presided. The following was the programme rendered:—

Organ Solo—Overture to Stradella ..... Flotow.
Charles Duff.
Chorus—"Sister" .....
The Boys' Chorus.
Recitation—"Melting Moments" .....
Herbert Treneer.
Vocal Solo—"Stand by the Old Flag" .....
John Nicolson.
Piano Solo—(*a*) Melody (Paderewski). (*b*) Etude de Concert .....
Horace Valiant.
Chorus—"Stein Song" .....
The Boys' Chorus.
Piano Duet—(*a*) "The Last Farewell." (*b*) "Under the Linden Tree" .....
Charles Lavender and George Skinkle.
Vocal Solo—"When All is Still" .....
Thomas Kennedy.
Piano Solo—"Invitation to Dance" ..... Weber
Charles Duff.

Recitation—"Whistling Regiment" .....
ROY WILSON.
Vocal Solo—"The Bandalero" .....
JOSEPH BOUDREAULT.
Organ Solo—"Toccato" ..... Dubois.
HERBERT TRENEER.
Chorus—A Medley .....
THE BOYS' CHORUS.
GOD SAVE THE KING.

This programme was repeated with slight variations at St. John's Church, May 1st; at St. Mary's Church, May 9th, and at St. James' Church, May 16th, Mr. Andrews accompanying the pupils to the several places of entertainment.

CLOSING CONCERT.

The Brantford newspapers of June 18th reported that all the seats and all the available standing room in and adjacent to the Music Hall of the Ontario Institution for the Blind were filled last night (June 17th), the occasion being the closing concert, and although the night was the hottest of the season, the audience proved a most attentive and appreciative one.

Principal Gardiner extended a hearty welcome to the friends of the pupils, and, as is his custom at these entertainments, briefly reviewed the work of the session, touching lightly upon a few extraordinary incidents. The enrollment, he said, was exactly the same as in the preceding session, namely, 123. The progress in the literary, musical and industrial departments had been satisfactory; the curriculum had been extended by the addition of three classes in physiology. He referred to the efforts put forth in other countries on behalf of the adult blind, and prophesied that Canadian attention would soon be directed to this pressing problem. He had endeavored to get into communication with as many ex-pupils as possible, to send them reports and find out how they were getting along, and he had been pleased to learn that many of them were doing well. Printed programmes had been supplied to the audience, so that the numbers could be brought on without delays. The recitations were four in number, two by girls and two by boys, all of whom did credit to their instructor, Miss M. Walsh. She had trained about twenty little girls to sing "The Red, White and Blue" in connection with Albert Lott's recitation on "The Union Jack," and had provided them with flags to wave. The little folks, in their white dresses, made a charming picture. The musical portion of the programme was under the direction of Mr. Andrews.

The musical numbers were of unusual excellence, and, as Mr. W. N. Andrews, the musical director, stated, "No musical institution could possibly give a more exacting and classical programme." This noteworthy fact proves absolutely that the musical blind is equal to the best of the musical seeing profession. The exceptional merit of the programme demanded a well-developed technique and a thoughful and artistic interpretation. Each young performer played with a brilliancy and a comprehensiveness which evoked applause from the large audience. Liszt, Beethoven, Chopin, Karganoff, the brilliant, the subtle, and the graceful tenderness in music, were all beautifully brought out by the clever young artists. The organ numbers were certainly a surprise to all lovers of the king of instruments. It is no exaggeration to say that Mendelssohn's second sonata, or Bach's heavy D minor toccato or fugue, or Batiste offertory, seldom received a more skilful rendition than was given by the three young organ students.

The registration, pedal and manual technique were all that could be desired.

Voice culture is a new departure for the O. I. B., and the Institution deserves the highest praise for introducing solo singing. Mr. Boudreault possesses an excellent bass voice and sang with splendid effect "The Two Grenadiers." Mr. Nicolson, the tenor robusto, in a fine, ringing, clear voice, sang with excellent expression the oratorio solo, "Honor and Arms," and the popular song, "The Roll Call."

The choral class, which has so much in the past been noted for its excellent work, sustained its reputation. Each number was beautifully sung, and was received with great applause. "Sweetly Fall the Shades of Evening" was sung unaccompanied, and a splendid effect was the result.

The overture, "Semiramide," with four pianos, organ and orchestra, was one of the features of the evening. The ensemble was as nearly perfect as possible. Mr. Andrews introduced a most effective vocal part after the first movement, the "Andante" being sung by the choral class, with a full accompaniment of the orchestra, pianos and organ. Too much praise cannot be given Mr. W. N. Andrews and his associates for the admirable programme rendered. The singing of the National Anthem brought one of the best concerts ever held at the O. I. B. to a successful close. The following is the

PROGRAMME:

Organ Sonata II., Grave, Adagio, Allegro, Mendelssohn—CHARLES DUFF.
Part Song, "How Sweet the Moonlight Sleeps," H. Leslie—CHORAL CLASS.
Recitation, "Little Christel," Mrs. Mary Bradley—ETHEL SQUAIR.
Piano Sonata, "Pathetique," Grave. Molto Allegro, Beethoven—ALICE STICKLEY.
Vocal Solo, "The Two Grenadiers," Schumann—JOSEPH BOUDREAULT.
Recitation, "The Boyless Town"—HARRY WHITE.
Piano, Rhapsody No. 12, Liszt—LOUISE DESCHENES.
Part Song, "Jack and Jill," Caldicott—CHORAL CLASS.
Organ, Toccata and Fugue, D. Minor. Bach—HERBERT TRENEER.
Recitation, "Baby in Church"—MARY MARSH.
Vocal Solo, "Honor and Arms," Handel—JOHN NICOLSON.
Piano, "Valse Caprice," Karganoff—THOMAS KENNEDY.
Part Song, "Softly Fall the Shades of Evening," Hatton—CHORAL CLASS.
Organ, "Offertory," Batiste—EDWARD SIMPSON.
Recitation, "The Union Jack," ALBERT LOTT.
Piano, "Berceuse," Chopin—HERBERT TRENEER.
Concerted, "Semiramide," Rossini—*Pianos*: GRACE KIGHT and VICTORIA THOMSON, ALICE STICKLEY and MARGARET LIGGETT, CHARLES LAVENDER and THOMAS KENNEDY, HORACE VALIANT and CAMERON ALLISON; *Organ*, CHARLES DUFF; Orchestra.

GOD SAVE THE KING.

IN VACATION.

During the vacation, some of the pupils appeared before the public. The *Ottawa Journal* of July 24th stated that on the preceding evening a most unique concert was given at St. Luke's Church Sunday school hall by three blind performers, Misses A. V. Thomson and G. Kight and Mr. J. E. Boudreault. Had one not been aware of the fact, it would have been hard to credit that they were deprived of one of God's greatest blessings. The chair was occupied by Rev. Walter M. Loucks, of St. Matthew's Church, and the attendance was good, the proceeds being towards their expenses at the school for the blind at Brantford. The fine baritone voice of Mr. Boudreault was heard to great advantage in several selections, his first being martial music. Misses Thomson and Kight are vocalists, elocutionists and pianists, and in each department they showed wonderful ability.

The *Ottawa Citizen* of August 20th said that a very successful benefit concert was given in the Foresters' Hall at Navan (a village thirteen miles from Ottawa) on Thursday by pupils of the Ontario Institution for the Blind, who entertained a large audience in a most acceptable and talented manner. Recognizing the worthy work of the Institution, the people turned out in large numbers, and although the admission fee was comparatively nominal, the receipts were large. Miss Grace Kight and Miss Victoria Thomson and Mr. Joseph Boudreault were the principal entertainers. The numbers contributed were piano duets, Misses Kight and Thomson; songs, Miss Kight; recitation, Miss Kight; piano solo, Miss Kight; songs, Mr. Boudreault. The programme was conducted in a very orderly and pleasing manner by Rev. John Osborne. Some good numbers upon the phonograph were given at the close of the concert. The concert was arranged by S. Bickerton, to whom great credit is due for his untiring energy and zeal in the cause for which he labored.

The *Kingston News* of August 5th said: Last evening, after the usual service at St. John's Church, Portsmouth, a young student from the Brantford Blind Institution, named Herbert Treneer, of this city, gave an organ recital which was greatly enjoyed by the congregation.

A correspondent writes that Isabel Elliott gave a concert on August 2nd in the Methodist church at Elkhorn, Manitoba, more than five hundred persons being present, and though there was no charge for admission, the audience was so pleased that a collection amounting to $44.85 was taken up for her. This, and the proceeds of another concert which she gave during the vacation in Saskatchewan will be used if necessary in furtherance of her instruction in vocal and instrumental music. A newspaper report says that Miss Elliott proved herself a singer or no mean order, as well as a competent elocutionist.

Another successful entertainment was given in Ottawa by the pupils on September 10th, which netted $90.00. The announcements were made in English and French, but the programmes were printed in the latter language only. The *Citizen* reported that "the good work being done by the Brantford Institution for the Blind was made manifest at a pleasant and instructive entertainment given by the Ottawa students of this institution in the hall of the Monument National last night. The entertainment was under the patronage of Mgr. J. A. Routhier, V.G., and a great number enjoyed the musical treat provided by the students. A feature of the evening was a reading by Miss Grace Kight from a book of the kind used in the Institution, the type of which is raised and the reading is accomplished by running the fingers over the lines. Miss Kight also gave several very delightful recitations and her performance on the piano with Miss Anna Thomson was much appreciated. The singing of Mr. Joseph Boudreault also occasioned much applause. At the conclusion of the entertainment Mgr. Routhier congratulated the Institution upon the work being accomplished, and also the people of Ottawa upon their appreciation of this work shown by turning out in such numbers to attend the concert."

The Dysart correspondent of the Cupar, Sask., *Herald*, under date Sept. 3rd, wrote that a "first-class concert was given in the school last Saturday evening before a full audience. Miss Belle Elliott, of Elkhorn, Man., a pupil of the Ontario Institution for the Blind, was the principal artiste, and her songs and recitations were well received by the audience. The concert closed with the singing of the National Anthem. The net proceeds of the concert amounted to over twenty dollars; this was handed to Miss Elliott, who intends studying for an evangelist. She left on Monday morning for the east."

The *Elkhorn Advocate* of August 8th said that at the concert in that town Miss Elliott's talent for singing was shown in the songs, "The Holy City," "Lead, Kindly Light," "Daddy" and "Robin Adair." Her ability for elocution was shown in "My Last Ride with English Jim" and "How Uncle Podger Hung the Picture." Miss Elliott was encored several times.

The *Kingston Whig* of Sept. 20th said that on Thursday night, in St. John's Church, Portsmouth, Herbert Treneer, a young Kingston lad totally blind, a pupil of the O. I. B., gave an organ recital which gave pleasure to many hearers. The young man played several difficult numbers, showing remarkable skill in pedaling and in technique. When it is known that his training in organ music extends over only eighteen months, the future which lies before him can be easily pictured. His concluding number was the march from "Naaman," and he played it with much dash and fire. The church was filled with people, many of whom stopped to congratulate the young organist after the recital.

John Nicolson, another pupil, gave a series of concerts during the vacation, at Bruce Mines, Thessalon, Gordon Lake, Ophir, McDowell's school house, Dunn's Valley, Coward's Valley, Rydal Bank, St. Joseph's Island and Mount Zion, the net receipts of which were about $260.00. One of these was thus reported by the *Bruce Mines Spectator* of September 6th: The old Union Church, on Friday evening last, was the scene of a very successful concert for the benefit of Mr. Nicolson. This gentleman, as our readers are aware, has been studying, since his accident, the art of singing, and is now the possessor of a very fine baritone voice, which gave great pleasure to his hearers. His rendering of various difficult selections which he chose, particularly "The White Squall" and "Three for Jack," was particularly fine, and Mr. Nicolson showed himself to be the possessor, not only of a very sweet voice, but one of extraordinary compass. If from the editorial chair we might be permitted to make a suggestion, it would be that Mr. Nicolson should reserve himself a little, thereby allowing people to be more anxious than even now to have him return to our midst. In addition to this, it must be a tremendous strain upon even the most carefully trained voice to get through such a large amount of work in one evening. On the whole his singing left nothing to be desired, and we most heartily congratulate him upon the great advance he has made since the occasion of his last visit.

Le Temps, of Ottawa, in its issue of September 23rd, said: M. J. E. Boudreault, qui est presque aveugle, part cette semaine pour Brantford, Ont., ou il va reprendre ses cours a l'Institut des aveugles. M. Boudreault, qui possede une magnifique voix de baryton, a chanté hier, avec talent, un "O Salutaris" de Giorza, a la Basilique.

Records of the output of the girls' class in bead-work and of the classes in sewing, cane chair seating and hammock making were not kept.

Bead Work.

The illustration on page 40 shows some of the articles made by the junior pupils (boys) under the instruction of Miss M. Cronk, the (blind) Visitors' Guide, with beads and brass wire as the raw materials. She teaches a class of 16 volunteers for an hour each evening, and Miss Alice Hepburn, a pupil teacher (blind) has a similar class of 23 girls. One of Miss Cronk's pupils made 80 pieces of work during the session, without neglecting his literary classes or his music, and the total product of the boys' class was 323 pieces, comprising 7 large work baskets, 9 small round baskets

with handles, 6 square baskets (card receivers), 4 flower baskets (oval), 1 three-cornered work basket, 2 square baskets with covers and handles, 7 oblong jewel cases, 23 round jewel cases, 3 cradles, 2 large canoes, 14 small canoes, 8 sofas, 26 cups and saucers, 28 cream pitchers, 2 teapots, 1 sugar bowl, 111 napkin rings, 69 chairs.

At the Central Canada Exhibition held in Ottawa, David McCaul, a pupil who has attended the O. I. B. less than a year, obtained second prize for cane chair seating.

Grace Kight, at the same fair, took first prize for sewing (a pair of pillow shams), second prize for a collection of knitting, and second prize for a collection of bead work.

Edith O'Reilly, another Ottawa pupil, took first prize for a collection of knitting of all kinds.

At the Central Saskatchewan Agricultural Society's Exhibition held at Saskatoon, Leslie Ross took first prize for bead work.

These pupils brought their prize tickets back with them on opening day, September 25th.

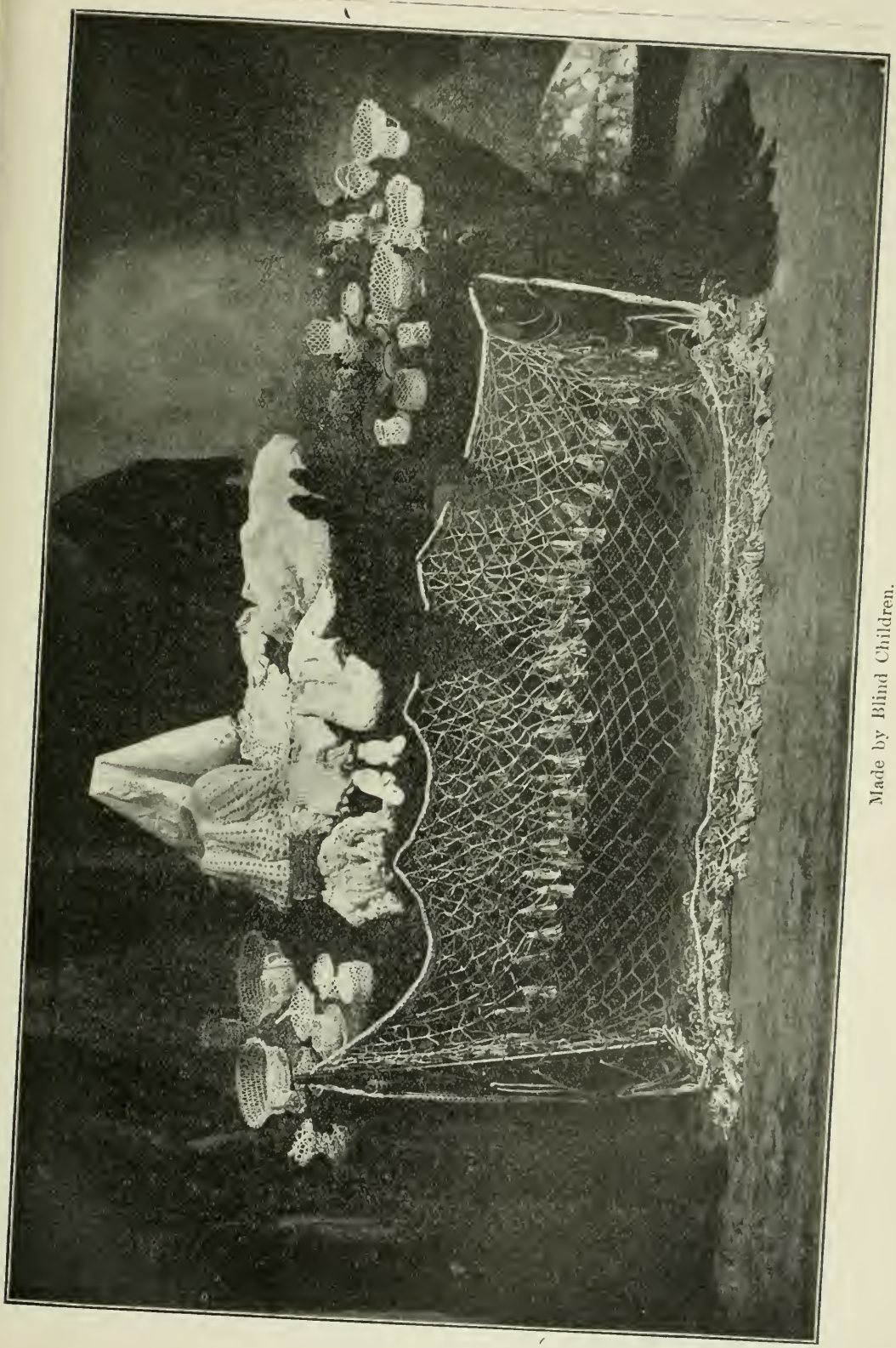
At the Indian Head, Saskatchewan, Fair, Sarah Liggett obtained three first prizes for a golf jacket, a baby's jacket and a pair of mittens, all of which she knitted at the O. I. B.

Knitting and Crocheting.

During the session Miss Haycock gave instruction to 37 girls in knitting and to 16 girls in crocheting. Owing to the competition of machine-made goods, and of goods made by well-to-do ladies living with their parents, the prices of knitted goods are too low to enable a blind person to wholly support herself by this branch of industry. Nevertheless it is a very pleasant and convenient form of employment, and it brings some pecuniary remuneration. Besides a number of small articles upon which beginners practised, the pupils in the kniting room produced 20 pairs of bedroom boots, 5 pairs of bedroom slippers (knitted), 2 pairs of bedroom slippers (crocheted), 10 pairs of bootees, 12 chest protectors, 2 pairs of men's cuffs, 7 golf coats, 1 comb and brush bag, 6 babies' bonnets, 3 pairs of men's gloves, 2 pairs of babies' socks, 2 pairs of men's socks (machine knitted), 4 pairs of babies' stockings, 6 shawls, 1 breakfast jacket (crocheted), 5 babies' jackets, 7 wool mats, 22 handkerchief sachets, 1 set table mats (crocheted), 12 tea-pot holders, 3 lemon pin-cushions (knitted), 31 pairs of mittens, 3 fascinators, 2 petticoats, 1 pudding dish cover (knitted), 1 slumber rug, 2 pairs over-stockings, 1 pin cushion (crocheted), 10 hair-pin holders, 1 tie, 6 yards of thread lace, 3 scarfs, 3 doilies, 2 babies' shirts, 1 tea cosy (crocheted), 1 pair of bed shoes.

The next two paragraphs are from the last report of the Perkins Institution, South Boston:

"For sightless students, the question what they shall be able to do becomes highly important; for to educate the blind on the intellectual side without giving them any trade or profession as a means to a livelihood is only less cruel than to leave them in ignorance. Hence the aptitudes of every pupil are studied and some trade or profession is acquired by everyone of normal intelligence. But experience has shown that the blind boy who can make brooms, cane chairs, or make mattresses, but whose intellectual training is confined to a smattering of 'the three R's,' often cuts but a sorry figure in life; moreover, those who are allowed to drop every subject of study that does not promise to contribute directly to the earning of a livelihood nearly always acquire a grasping spirit that magnifies the earning of money



Made by Blind Children.

above all other considerations, and a false estimate of the value of time that sometimes causes them to miss the larger success that comes by a little waiting. Too often, imbued with this spirit, they forget altogether to consider the propriety of the means of acquiring money, and then the itinerant fiddler with his tin cup, or the peddler of shoe laces, is the result.

"Probably no line of work is so well suited to sightless men having normal intelligence and musical ear as the tuning of pianofortes. This fact has long been recognized at this institution and special stress is laid on the theory of sound in the science department and on the study of theory and harmony in the music department, as special preparation for the practical work of the tuning department."

Piano Tuning.

Twenty pupils received instruction in piano tuning during the session. Since January 1st, 1905, the services of the tuning teacher have been available for only a portion of each day, and during most of the year 1904 the health of his predecessor was so precarious that full justice was not done to this important department. Careful discrimination is necessary in the selection of pupils to be instructed in tuning, because the bad work of one incompetent blind tuner causes public distrust in all blind tuners. Only young men of good appearance, free from bad habits, with fair general and musical education, industrious and willing to spend sufficient time to perfect themselves in the trade, should be allowed to undertake the tuning, and those should have ample instruction by the teacher and plenty of opportunity for practice under his supervision. No complete record having been kept of the achievements of the ex-pupils who are earning their living as tuners, I asked a visitor from Toronto to supply me with such information as he could obtain, and have been favored with the following interesting communication, in which I have inserted the figures indicating the periods spent in this Institution by each gentleman whose name is mentioned:—

"Toronto, 6th July, 1907.

"Mr. Gardiner,

"Dear Sir,—During my recent visit to your Institution I was greatly pleased with the interest you manifested in the future welfare and prosperity of the pupils. With your permission I will endeavor to give you a brief review of what has been accomplished by some of the ex-pupils who are following the piano-tuning industry, with a few practical hints, and will confine my remarks to those who are earning from fifteen to twenty-five dollars per week.

"Some years ago, when the tuning department was in its infancy, the question of securing employment for the graduating pupils appeared to be a very serious problem, but eventually, through the influence of Mr. W. G. Raymond (1873-77) and others, the Mason & Risch Piano Company, of Toronto, opened their doors for a trial of the most advanced pupils, Arthur Curtis (1873-82) being the first to secure a situation, closely followed by Sandford Leppard (1872-83) and Robert H. Stewart (1873-83). Their work proving satisfactory, James E. Shaughnessy (1876-85) was the next to be employed by the same Company. About this time, James Common was in the tuning class, but being further advanced with the willow work, he was advised to give up the tuning and devote his whole attention to his trade in the workshop; after graduating from which he worked at the willow and

rattan business at home for a short time, but, his expectations not being realized, he decided to complete his course in piano tuning, and returning to Brantford, he secured the services of the Raymond brothers for private instruction. When this was completed, with the assistance of Mr. Raymond, he succeeded in getting a situation with the Newcombe Piano Company, thus making another opening for the graduates of the Institution. By this time Arthur Curtis and Robert H. Stewart decided to leave the Mason & Risch Company and start out for themselves, and it is reported that they have succeeded wonderfully well. The vacancies were filled by James Common (1872-82) and Alfred Moreland (1881-86). Sandford Leppard was now removed from the factory to the ware-rooms where he had a better chance to display his musical ability. When Gourlay, Winter & Leeming started in the piano business, a tempting salary induced Mr. Leppard to go with them, James Shaughnessy filling his former position. Other pupils who obtained situations in Toronto factories were Hans Matson (1878-89), George Shepherd (1878-96), George McArthur (1887-98), William McKim (1875-83), Alexander Dyce (1887-99), John A. Murray (1881-94), William H. Joyce (1895-99), William Wilson (1883-95), Sidney Garner (1891-99), Harry Gates (1889-1901), Norman Young (1900-03), Ernest Burke (1891-1904). James Common remained with the Mason & Risch Company over twelve years, having charge of the fine tuning and spending considerable time in the ware-rooms. All through that period he kept up an outside tuning connection of about two hundred pianos and also did some selling. He found that the mechanical ideas he acquired in the workshop of the O. I. B., while he was learning the willow trade, were of assistance to him in repairing pianos and organs. After leaving the Mason & Risch Company, he applied for a situation as tuner with the Gerhard Heintzman Company. This was a new field, as Mr. Heintzman had always strongly opposed employing blind workmen. But Mr. Common went there highly recommended and he had little difficulty in getting higher wages than had been previously paid to any tuner. In a short time he had full charge of the tuning department, and it was not long until other ex-pupils were engaged; among them George McArthur, John A. Murray, Harry Gates, Alexander Dyce, William Wilson, Edward Hermon (1881-92) and others who started as improvers. Without going into details with regard to other firms, it suffices to say that all the leading piano manufacturers in Ontario have given employment to ex-pupils of the O. I. B. You will notice that it is not unusual for our tuners to exchange their situations for better ones. At the present time in Toronto we find Sandford Leppard in the ware-rooms of Gourlay, Winter & Leeming, having charge of the entire stock of pianos and organs, and he is also the tuning instructor for the Conservatory of Music. David Little (1895-1905), is his assistant. In their factory we find Alexander Dyce, head tuner, assisted by James Forrest (1894-1903). In the Newcombe Company we have James Shaughnessy as fine tuner and William McKim, one of the shareholders and also tuner. In the Mason & Risch Company Sidney Garner in the ware-rooms and George Shepherd doing the fine tuning in the factory, assisted by those already mentioned. In the Gerhard Heintzman Company the head tuners are James Common, George McArthur, John A. Murray. The Bell Company at Guelph have William L. Kiel (1873-78), for their fine tuner, ably assisted by Albert J. Kaiser (1880-93). In Kertzman's factory, Buffalo, William H. Joyce is fine tuner. In Ottawa, Frederick Medlow (1891-96) has a splendid position as tuner and salesman for J. Orme & Son. Alfred Moreland has also a fine situation with one of the leading firms in Montreal. Others have located in Chicago and Detroit. Apart from those

in piano factories there are several graduates of the O. I. B. who preferred working up an outside connection as tuners on their own account. J. Edwin Nelles, Paris (1879-86), is reported to have made sufficient money to retire from the trade, and Roger W. Roberts, Stratford (1872-76), is said to have done equally well. When we realize that the yearly output of Ontario piano factories is over fifteen thousand instruments, it is evident that there is a wide field for good tuners and salesmen. The fact is now well established that a man without his sight can tune a piano as well, and as quickly, as anyone, and also do any ordinary repairing. It is, then, of great importance that your instructor be well versed in a thorough, up-to-date system of tuning and spend much time in coaching and carefully watching the progress and habits of the pupils in speed and accuracy. Those of us who have been long at the business have experienced considerable trouble with a few commencing to work in factories who were painfully slow and awkward in the way of handling their tools. Selling pianos and organs has become quite popular with tuners. A number of us have been fairly successful in connecting that line with tuning. I think it would be a splendid idea to encourage public speaking and debating classes in your Institution. It would have a tendency to better qualify the pupils for filling positions in later years and in the way of facing the world. In conclusion, I might add that nearly all those mentioned in this review have purchased homes of their own, with comfortable surroundings."

This is a most encouraging report, and I wish I could give as good a one from any other single industry in which the blind are engaged. Not that the outlook is entirely discouraging, for I receive some optimistic letters from blind men engaged in handicrafts, the following being a sample:—

Peterborough, 11th March, 1907.

Mr. Gardiner,

Dear Sir,—I have received your report and my brother-in-law also received one. I read it all through and was greatly pleased with the way that interest in the cause of the blind is widening. I have realized ever since I started to do for myself the great need for a good general education, and most especially along social lines. The nearer we can come to the same level with the public generally the better will we be able to do our little part in the uplifting of the world and making it better than we found it. I think if the adult boys were taught as many kinds of repairing as possible it would help greatly. I made many times more out of repairing than out of making things. I had to learn repairing myself, as there was so much call for it, and I do not think there is much in willow, rattan or wood, including upholstering, that I cannot do, and my wife and daughter can do cane-seating, and I am teaching my brother-in-law, Alfred Airriess, who is living with me, but my general education has been of untold benefit to me, and when I think of what I am and what I would have been without it, I am grateful beyond words to the Institution. I belong to the literary club at the Y. M. C. A. I often wish I could have a good talk with you and go over the place and see what you are all doing, but I cannot afford it yet.

Please send me four bunches of coarse chair cane and a few strands of binding cane, and I will send the amount by post.

With earnest wishes for your every success and hearty co-operation of all your assistants, I remain, Sir, your most sincere well wisher,

George W. Armstrong, 55 Weller Street, Peterborough.

With the appointment of Mr. Donkin as Trades Instructor, it is intended to revive the teaching of willow basket making, which has been in abeyance for some time. Instruction in hammock making and cane chair seating will be continued, and it is probable that an outfit of small carpenters' benches and tools will be provided similar to those in use in the manual training schools for sighted pupils. The introduction of broom making, which continues to be the favorite industry in United States schools for the blind, is still under consideration.

"The trades taught in the Massachusetts Institution include chair-caning, mattress-making, furniture repairing and piano tuning for the young men, and sewing, dress cutting and fitting and general housework for the young women.

"After being in the school from thirteen to fifteen years, every young man of average intelligence has received a sound literary education, and is prepared to earn a livelihood as a musician, tuner of pianofortes, chair-caner, or mattress-maker. The young women receive an equivalent literary training and manual training fitted to their needs.

"A number of trades were taught at first, but in later years, with the tremenduous change that has come about in our industrial system with the advent of machinery, the sightless have suffered with others, and certain trades that were formerly taught are no longer feasible.

"With the closing of one industrial avenue after another the problem of suitable trades for the sightless has become more and more difficult, and there has seemed to be but one way to meet it, namely, to make more thorough and comprehensive the literary and musical training of the blind, and this has been done.

"The classes in the Massachusetts Institution are small, ten pupils being the maximum."

Pupils' Clothing.

The literary examiner, Mr. Passmore, who visited the Institution in June, just before the end of the session, remarked that some of the pupils were insufficiently supplied with clothing, and that the girls were more careful of their appearance than the boys. He added that the Government could scarcely be expected to supply clothing.

This subject was touched editorially last year by the *Brantford Expositor*, which said: "There are a number of blind children in the Province whose friends are not able to clothe their children, or to provide them with travelling money. The suggestion is made that the municipalities should assume the expense of sending such children to Brantford, but if they are not willing to do so, there should be no hesitation on the part of the Ontario Government in assuming such a comparatively small charge."

Some of the neighboring States have laws under which, when the parent fails to supply necessary clothing, the Institution can purchase what is required, up to forty dollars' worth, and collect payment from the county to which the child belongs. By-law No. 9 of the Ontario Institution sets forth that the Principal "shall see that the pupils are suitably and comfortably clad, either by their parents or friends, or by the municipality from which they come, or in the case of indigent orphans or half-orphans, by the Government."

My endeavor has been to have the parents supply clothing for their children when at all possible, as I considered it better for both parents and children that the former should not be wholly relieved of the support of the

latter. In correspondence on this subject, I have taken occasion to remind parents that, if the child were at home, instead of at this school, they would have to feed as well as clothe him, therefore it could not be unjust to ask them to pay for the clothes only. I have heard of extreme cases, in connection with this school and with the school for the Deaf at Belleville, in which children went home for vacation well dressed with clothing paid for by the Government and came back clad in old rags, the Government clothes having been kept at home for other members of the family. Having all kinds of people to deal with, I am of opinion that the present system works very well, and no radical change is required. Under it, orphans are liberally supplied with clothing at Government expense, and children, whose parents may not be able to supply their needs promptly, are provided with clothes bought for them and charged to them, and, generally, paid for by the parents in course of time. Leaving home in September, and returning in June, children may bring an outfit sufficient to carry them comfortably until May, when they need some lighter clothes and probably new hats and shoes, which would be provided as a matter of course if the children were at home and in sight of their parents. For such needs, a few dollars deposited with the Bursar by the parents would amply provide, and in most cases the money is forthcoming when asked for. The children whom Mr. Passmore noticed as not being well dressed were neither orphans nor indigent, and it would have been no kindness to provide them with new outfits at public expense, but rather an encouragement to unnecessary dependence.

For the guidance of parents, I append the list of requirements as prepared by the Matrons of the New York State School, which has been submitted to the Matron of the O. I. B. and approved by her:—

Girls.	Older Boys.	Younger Boys.
1 coat.	1 Sunday suit.	1 Sunday suit.
1 play coat.	1 week-day suit.	1 week-day suit.
1 hat.	2 pairs extra trousers.	3 pairs extra trousers.
1 hood.	1 overcoat.	4 blouses.
1 Sunday dress.	2 suits underwear.	1 overcoat.
1 week-day dress.	4 shirts.	2 suits underwear.
2 petticoats.	6 collars.	2 night shirts.
2 suits underwear.	3 night shirts.	2 pairs suspenders.
2 night dresses.	2 pairs suspenders.	2 pairs elastic garters.
2 corset waists.	2 pairs shoes.	2 pairs shoes.
4 pairs stockings.	1 pair rubbers.	1 pair rubbers.
2 pairs shoes.	4 pairs socks.	6 pairs stockings.
1 pair rubbers.	3 neckties.	3 Windsor ties.
3 aprons.	1 muffler.	1 muffler.
1 pair mittents.	1 summer hat or cap.	1 summer cap.
1 pair side elastics.	1 winter hat or cap.	1 winter cap.
6 handkerchiefs.	1 pair mittens.	1 pair mittens.
brush and comb.	8 handkerchiefs.	8 handkerchiefs.
tooth brush.	umbrella.	comb and brush.
umbrella.	comb and brush.	tooth brush.
	tooth brush.	

These are the minimum requirements. Each girl should have two week-day dresses for winter and two for summer, and many will require more handkerchiefs than are specified above.

I would much prefer that parents should not send money direct to their children when they are at school. When the money is sent to me, it is deposited with the Bursar and a receipt taken, and whenever a portion of it is withdrawn a receipt is given. Usually the money lasts longer when I have some oversight over the expenditure. Then the danger of having the

money lost or stolen is avoided by sending it direct to me. Use money orders or registered letters, not bank cheques, in remitting.

The pupils are supplied with an abundance of good, wholesome food, well-cooked. Parents do their children harm, not good, by sending to them candies, cakes and other, probably indigestible, commodities, to be eaten between meals or at night.

Matilda Ziegler Magazine for the Blind.

At the request of the publishers, I sent to the office of the Matilda Ziegler Magazine for the Blind, 1931 Broadway, New York City, the names and addresses of 350 of the ex-pupils of the O. I. B. A good friend, who did not wish his name mentioned, volunteered to defray the expenses of placing the magazine in the hands of the indigent blind. While waiting for arrangements to be completed, I ordered a few copies for the pupils and teachers to read, remitting 10 cents per copy for postage. About the middle of May I received a letter from Mr. Holmes, manager of the magazine, stating that he had "struck a snag in regard to the delivery of the magazine in Canada, in that on the 10th of May the second class postage rate, which had heretofore been 1c. per lb., between the United States and Canada, has been made 4c. per pound, which would quadruple the postage we would have to pay; but for this we had determined to give our magazine free to the reading blind of Canada."

At Mr. Holmes' request, I wrote to the Post Office Department at Ottawa, explaining the complication and asking if something could not be done to relieve the situation. In reply, I received a copy of a letter sent from the Canadian Department to Mr. Holmes, dated 11th June, as follows:—

"With further reference to your letter of 29th May to the Postmaster General, expressing the hope that newspapers and periodicals intended for the use of the blind may be allowed to enter Canada from the United States at the rate of postage applicable to second-class matter previous to the convention recently entered into between the two countries, I beg to say that, as such periodicals are printed and published in the United States, this Department has no control over the rate of postage which the United States postal authorities may require before they will allow their transmission by means of post. If, however, you or others interested can arrange with the United States Post Office Department to have such matter accepted either at the low rate of postage formerly enjoyed, or as free matter, this Department will be pleased to co-operate, and allow its transmission free through Canadian mails. This subject is one for the consideration of the United States Post Office Department, as their revenue would be affected. If, however, they consent to a loss of revenue by a lessening of the rates, or accepting such matter for free transmission, this Department would waive its treaty rights, and, by mutual arrangement, admit the passage of such matter free of postage through Canadian mails."

I heard nothing of the result of the publisher's application to Washington for some time, but, meeting Mr. Holmes in Boston in August, he informed me that he expected to have the magazines sent by express to one point in Canada and thence posted to Canadian subscribers. Probably the Canadian blind will be reading their Zieglers regularly, before this report reaches them.

Visits to Other Institutions.

In the month of April, with the permission of the Minister, I visited the schools for blind children and youth, and the shops for blind adults, in the States of Wisconsin and Michigan. Monday, April 8th, I spent at the Wisconsin School for the Blind, at Janesville, Mr. Harvey Clark Superintendent. The buildings and grounds are in good condition, the main building, though apparently not as large as that of the Ontario Institution, really affording more accommodation by means of the basement under the whole building, a system of construction which is also applied to the buildings of the Michigan School at Lansing and of the Michigan Employment Institution at Saginaw.

The heating apparatus is located in a separate building situated on a side hill, the system being low pressure and gravity, using bituminous coal for fuel. The dynamo for lighting the building is managed by the engine-room staff, current being taken from the city during the summer months when the Institution fires are out.

The floors in the central portion of the main building are of tiles; in the corridors of hard wood; the walls painted, with all corners protected by wooden beading. The stairs and landings are covered with corrugated iron. All doors are neatly numbered and lettered.

The system of small dormitories prevails, three or four pupils to each, which is preferable to our system of having ten to twenty pupils sleeping in one room. There are no special appliances for ventilation, nor did I observe any appliances or arrangements for out-door exercise.

The dining tables are conveniently arranged with a passage two feet wide through the centre of each, lengthwise, for the use of the waiter, which makes it unnecessary to hand food or drink over the shoulders of the pupils.

The gymnasium, which is large and well furnished, is also used as an assembly hall. It is located on the third floor, has a platform on the side for the orchestra and those who assist in entertaining, and a supply of chairs for seating an audience. The gymnastic instructor is a lady, and dancing is among the branches taught. Every Saturday evening there is a "social" in the gymnasium, when the male and female pupils engage in round dances, the school orchestra supplying the music. The Superintendent is of opinion that this exercise promotes grace of movement, and that the association of the sexes under proper supervision is beneficial.

There is no religious instruction in the Wisconsin school, the law of the State forbidding it.

There are about seventy acres of land connected with the Institution, much of which is in pasture. A herd of cows is kept for the supply of milk for the pupils. There is a small green-house, and the grounds are ornamented with flower beds, but lack the spacious walks and abundant shade trees which are a feature of the Ontario school grounds.

There is no street car service from the city, which is distant about two miles.

About one hundred pupils are in attendance, the sexes being equally represented. Pupils are received between the ages of eight and twenty-one; a few are allowed to remain after passing twenty-one, but none are received over that age. None are admitted to learn tuning alone, nor to spend all their time in the industrial department. The tuning department is at present in the basement, but Superintendent Clark has advised the erection of a separate music building, with provision of a massage department and swimming tanks.

There is not much canvassing for pupils by the officers of the school. The law of the State requires the County School Inspectors to report all cases of blindness in the State, but this work is not thoroughly done.

The chief design of the School being to give an English education to the blind children of the State, the literary work takes precedence over the musical and industrial.

There is a full graded Public School course, with Latin in addition. Each of the teachers has practically the same pupils throughout the day, instead of each taking some junior and some senior classes, as is the custom in the Ontario school.

No pupils being received under the age of eight, there is very little Kindergarten work, the so-called Kindergarten class being small with large pupils. From the beginning the children are taught to read the New York point system, the embossed line being entirely omitted. The custom at Brantford is to teach the embossed letters first, and take the point later.

More text books are used in the Wisconsin school than in the Ontario school: less dictation.

There are three classes in Domestic Science, with room and appliances to accommodate all the female pupils, whether partially or wholly blind. This department has a special teacher and is regarded as particularly useful.

One teacher has charge of the sewing and knitting classes, for which only one room is provided. The little boys, as well as the girls, are taught to knit and sew. The first sewing is done on canvas, the work corresponding to that done in our Kindergarten. Singer sewing machines are used.

In the workshop, adjacent to the main building, two ground-floor rooms are devoted to sloyd. One room, 20 feet by 20 feet, contains eight small carpenters' benches, provided with vise, saw, plane, hammer, chisel, etc., and with these tools totally blind boys produce neat inlaid work, towel racks, seats, benches and quite a variety of articles in wooden-ware. In the other room material and finished work are stored, and there is a turning lathe. No accidents to the pupils have ever occurred in this sloyd room, the blind pupils being more careful of their fingers than seeing children similarly employed. There are four classes in sloyd, and the sloyd teacher also has two classes in the literary department.

The training in sloyd is excellent to produce an all-round handy man, and is particularly useful for those who will some time try to repair pianos. Such a room and teacher could be added with advantage to the equipment of the Ontario school.

Rag-carpet weaving is taught in an adjoining room, the teacher stating that there has been a recent revival of demand for these goods, especially for rugs. A hand-loom costs forty dollars; those with fly-shuttles are dearer.

In the willow room is another teacher, who reported that he had ten or twelve pupils, though only one was actually at work at the moment of my visit. The products are dolls' buggies and large and small baskets, some of the latter being ornamented with plaited straw in colors. There was quite a stock of baskets on hand.

In one of the rooms is machinery for making brooms, but it is not used on account of the alleged impossibility of competing with convict labor.

An upper room in the workshop is used for teaching piano by a blind male) teacher, who also trains the orchestra composed of fifteen instruments. Six of the young musicians are Germans from Milwaukee. Admission to membership in the orchestra is regarded as a promotion, and there is great rivalry among the pupils for that honor, but I could not learn that ability

to play a portable instrument was looked upon as a likely means of earning a living.

Three literary societies are maintained, whose members give occasional entertainments to the other pupils.

In a small printing office, "manned" by a young lady, is a proof press and a fount of New York point print type, which must be very convenient when there is occasion to use many copies of a piece of music, a hymn, etc. The type is in excellent condition, though it has been so long in use that the oldest inhabitant could not tell me where it was obtained. After my return home, I made exhaustive inquiries, both through the Toronto Type Foundry and by letters to heads of Blind Institutions and type founders in the United States, but I had not succeeded in locating the matrices used in casting this type until August when I found them in Boston.

Mrs. Clark actively assists her husband in the management of the Institution, and I came away feeling under deep obligation to them both, as well as to their staff of teachers and officers, whom I have to thank for most courteous treatment and every assistance which it was in their power to bestow.

The Michigan School.

On Wednesday, April 10th, I visited the Michigan State School for the Blind at Lansing, Mr. C. H. Holmes Superintendent. The teaching staff is composed almost entirely of ladies. The buildings, located some distance from the city, can be reached by trolley, and the grounds, covering forty-five acres, are well laid out and cared for. There is a commodious Hospital in a separate building, and a fine workshop. The pupils number 112, and the teachers 16. No pupils over twenty-one years of age are received.

With the kitchens, store-rooms, Domestic Science room, hammock room, and even the Kindergarten class, in the basement, it is possible to have single-pupil dormitories on the floors above, as well as so many play-rooms, sitting-rooms and study-rooms that there is no necessity to use the class-rooms for anything but their legitimate purpose.

There were fifteen children in the Kindergarten, ranging in age from six to ten years. Their hand-work is beads and raffia. As in the Wisconsin School, instruction in line-letter reading is omitted. The point system is taught from the first, but at Lansing the Braille is used instead of the New York point.

The classes are small. In teaching reading the teacher holds a book printed in ink, and so avoids the eye-strain of following the raised letter on a surface of the same color. In one of the classes the alternate reading was excellent.

The pupils begin to write when they begin to read, but they are taught only point and type-writing. The use of the grooved card and pencil writing in ordinary italic script is unknown at both the Janesville and the Lansing schools. The ex-pupil who wishes to send a letter when he has no type-writer, or who wishes to write to a person not acquainted with point print, would be at a loss. It seems to me that the ability to write legibly with a pencil is of more practical value to a blind person than the ability to use a type-writer.

For point writing at all the institutions I visited, the pupils use what we call the pocket-guide. They have no desk "slate" with brass guide, such as is made by the Engineer and Carpenter of the Ontario Institution, and one gentleman who had seen the Brantford "slate" suggested that there

would be a large sale for these "slates" in the United States at a high price. There is so much hand-work in the manufacture that the price would have to be high to leave a profit.

Nor have they any dissected maps in those institutions, such as are made and used at Brantford. I saw a class in Geography endeavoring to get an idea of the capes and islands of the Mediterranean Sea from a circular wooden map of the Eastern Hemisphere. The teacher had heard of dissected maps, but had formed a poor opinion of them.

A class of five in Literature (four girls and one boy) discussed Longfellow's "Tales of a Wayside Inn" very intelligently. The Latin class was composed of four girls, reading extracts from Caesar, and using the continental pronunciation. The corresponding classes at Brantford contain 19 and 13 pupils respectively.

As at Janesville, no pupils are received at the Lansing school for piano-tuning or industrial work exclusively. The age limits for admission are seven to nineteen years.

The Domestic Science room will accommodate sixteen pupils at a time, and the Matron testifies that the results of this branch of instruction are excellent.

There is shelving for books in each class-room, instead of a large central library.

Dancing is not taught nor engaged in.

There are fifty pupils in music and, besides the piano, instruction is given on portable instruments, including the violin.

There is a stereotyping plant, where brass sheets are prepared and music is printed. Some of the sheet music is disposed of to other institutions.

The boys and girls occupy the same dining-room, but sit at separate tables. Before the meal, the pupils sing "Be present at our Table, Lord."

Some trouble had been experienced with children who had acquired awkward motions of the head and hands, but no effective remedy had been discovered.

Staff Notation.

I found at Lansing an excellent contrivance for teaching staff notation to the blind, a correct idea of which is particularly necessary for blind musicians who undertake to teach seeing pupils. It consists of hardwood tables twelve feet long by two feet wide, with two rows of grooves, five in each row, on a scale of one inch between grooves, representing the lines: hundreds of small gimlet holes are bored into the plank at regular intervals: the notes, sharps, flats and other signs are represented by movable castings of an alloy of aluminum, with two brass nails in each casting which will fit into two of the gimlet holes. With this apparatus any piece of music can be "set up," using the sheet printed in ink as "copy," and the blind pupil can study the arrangement by touch at leisure, until he knows just how the piece looks to the seeing person. It is the invention of Miss Grace Brown, teacher in the Lansing School for the Blind, who made and controls the patterns.

A compulsory education law, applicable to the blind, has been enacted in Michigan, but the Superintendent of the Lansing school estimates that 70 per cent. of those in the State legally eligible for admission are not in the school. It is the duty of the assessors to report all cases, but their returns are not complete, the common idea being that none should be reported except the totally blind.

The industrial training at the Lansing school includes piano-tuning, hammock-making (for boys only), broom and brush-making. I saw no pupils at work at the hour of my visit to the broom department, but there were brooms and whisks in all stages of manufacture, and I was informed that 28 pupils were engaged in this work at periods when they had no literary classes, and also for 3½ hours on Saturdays. There are five machines for winding brooms and five for sewing. Tuning is taught in a room over the broom shop, and hammock-making in the basement of the main building; the tuning pupils find employment either in piano factories or at custom work.

I have to thank Superintendent Holmes and his staff not only for courtesies during my visit, but also for information given me by letter after my return home.

Wisconsin Workshops for Adult Blind.

I visited the Wisconsin Workshop for the Adult Blind on Tuesday, April 9th, and was courteously received by the Superintendent, Mr. Oscar Kuestermann. The workshop is located at 1323 Vliet street, Milwaukee, Wis., in a rented building, and two small houses in the rear have also been rented for the storage of goods and materials. Mr. Kuestermann had an option on a good building, large enough for all purposes, which he hoped the Legislature would consent to purchase.

The present shop is 70 feet by 20 feet in size, and 28 men are employed at piece work, ten hours per day. It is estimated that there are more than 100 blind adults in Wisconsin able to learn a trade and work steadily, but even after their whereabouts are ascertained, there are difficulties in the way of getting them into the shop. Men who have peddled, or begged on the street, will not stay in a shop, particularly in the summer. Some who lived in distant parts of the State lacked the money to travel to Milwaukee, but the Legislature now grants a sum, not to exceed $75.00 in any case, to bring the blind man to Milwaukee and pay his board until he can earn enough for the latter purpose. There is no boarding house in connection with the Institution, and Mr. Kuestermann does not want one, his theory being that the various classes of men employed in the shop find their natural environment and are happier there than they would be elsewhere.

Besides the Superintendent, there are three sighted teachers, or foremen, who are responsible for the quality of the goods made. Only perfect goods are sold, and there is no effort to work them off as products of blind industry. The teachers sort and point all the willow, thus avoiding the mistake of having rods of different sizes in the same basket. Mr. Kuestermann does not believe in blind teachers for the blind, as sight is required to finish and perfect many kinds of work, and the division of labor between the sighted and the blind is advantageous to the latter. Thus when a score of men are making baskets it pays to have one man put on the handles.

There was a large variety of baskets in stock at the time of my visit, but Mr. Kuestermann said he was in arrears with his orders. The workmen use strong, revolving models, braced with iron, and as they are all on piece work, they work very rapidly and steadily. It has been found impossible to compete with Europe in cane or split-willow goods, even with the protection of a customs duty of 42 per cent., so the Milwaukee shop confines its labors to baskets made of one-year-old willow. Some of the material is imported, the supply grown in the United States not being sufficient for the demand, but arrangements are being made to have willow

grown on the farms connected with the several State institutions, and to have it peeled by the insane and feeble-minded, thus reducing the cost and at the same time benefiting the defectives by giving them something to do. Under the existing system, any reduction in the cost of material increases the earnings of the blind operatives.

Wooden bottoms are used for the baskets made at Milwaukee; these are bought ready shaped, but there is a boring machine in the shop run by an electric motor.

The new hands are first set to work making dolls' buggies, and as they become expert they are put at any class of basket for which an order can be obtained. They dislike to be transferred from a line of goods to which they are accustomed, but often, by the time an order for fifty or one hundred dozens is filled, they have become skilful, are making good wages, and are more reluctant to leave that job than they were to begin it. The aim is to keep them steadily employed, even with some variation in their earnings.

Mr. Kuestermann considers these men much better off working in a factory under sighted supervision than they could be trying to manufacture similar goods in their own homes. The quality of the factory goods is better, and the workman has no trouble about buying the material or selling the product. The trade must be worked up on business methods, with illustrated catalogues and a mail-order system. The departmental stores are large customers of the Milwaukee factory.

The blind workmen get as wages the difference between the cost of the material and the price received for the product; the State supplies the room, fuel, tools, and superintendence and instruction. The wages range from two dollars to twelve dollars per week, and the cost to the State is inside of $5,000.00 per year.

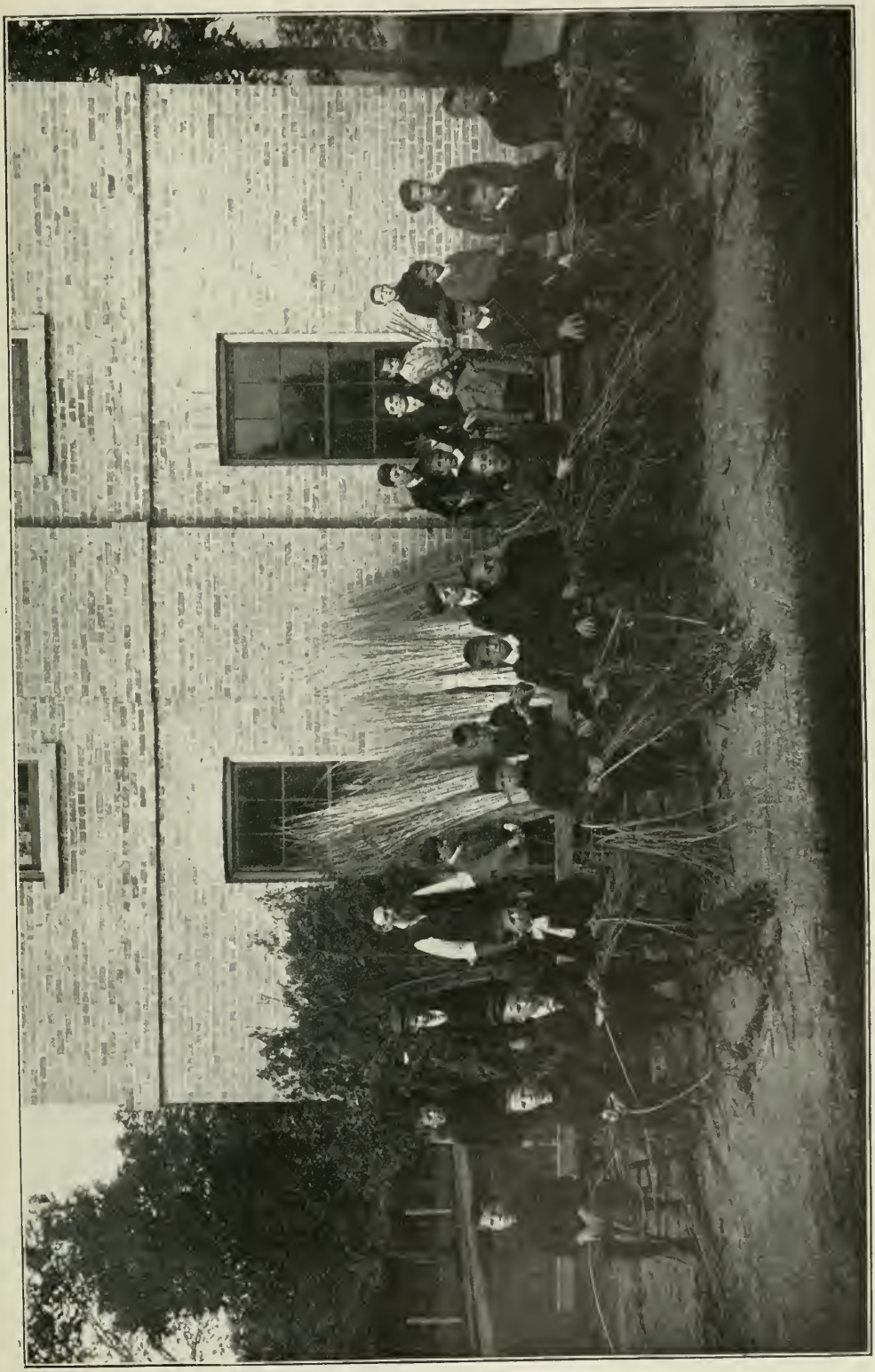
Mr. Kuestermann does not think well of broom-making as a trade for the blind. He tried mattresses and list shoes at first but abandoned them.

He finds an unlimited market for willow goods in the United States, sells some of the goods a long distance from the place of production, and is very firm in the opinion that a factory for blind adults should not only be under separate management from a school for blind youth, but that the two should not be in the same city.

Michigan Employment Institution for the Blind.

I visited this Institution on Thursady, April 11th. The buildings are situated on the north side of Houghton Avenue, between Hanchett and Benjamin streets, West Saginaw, Michigan, and consist of the Administration building, factory, men's dormitory, women's dormitory and stables, representing an investment of $80,000.00. Another building is needed for the storage of material and brooms.

The Superintendent, Mr. J. P. Hamilton, is himself a blind man, and most of his assistants are also blind. In his report to the Board of Trustees Mr. Hamilton says that the selection of a capable and reliable corps of helpers was no small task, as a small percentage of sighted persons are fitted for caring for the blind. "In many cases much outside influence was brought to bear to secure places for persons utterly unqualified to take positions in such an Institution as this. Believing that the success of any State Institution depends very largely on the kind of help employed, I used my most careful judgment in all cases and —— —— I wish to express to you my profound gratitude for the liberal and business-like way in which your body



Willow Peelers.

has persistently refused to allow outside influence to be brought to bear on filling the inferior offices here. It is absolutely essential that a superintendent and his assistants work in complete unison to get the best results, and in every instance have you kept this in mind."

Mr. Hamilton gives his reasons for deciding that "for a large number of blind people regularly engaged as well as being taught, the broom trade was the most practical. The demand for brooms is almost unlimited and there is almost nothing about the trade from the preparation of the corn to the bunching of the finished brooms which blind people cannot do unassisted. Besides the broom trade, hammock-making, chair-caning and cobbling have been introduced. On account of the increasing popularity of machine-made hammocks there is a very limited market for those made by hand, and the trade is not a paying one. Up to the present time chair-caning is the best thing we have been able to find for the women. Though not paying large wages, it furnishes them employment in their own homes and is clean, light work which they can do well. In addition to this, the women learn fancy work of many kinds, including knitting, crocheting, sewing and raffia work. For men, cobbling is one of the most practical trades we have found. A blind person with good mechanical ability can learn to repair shoes and can work fast enough to compete with sighted workmen. Work is always brought and called for. Very few blind people, becoming blind in later life, are able to master the art of tuning a piano well, and at the same time the necessary mechanical skill to enable them successfully to repair and regulate pianos."

Mr. Hamilton defends the Saginaw system of rooming and boarding the workmen and apprentices, which, he says, has been severely criticized by some workers for the blind, more especially those from the east. "Blind people necessarily earn small wages, and the theory that they should live outside such institutions as this, on account of the good they get from contact with the outside world, results in their living under saloons, over saloons, in garrets and cellars and basements, and anywhere they can get in cheap." On the plan contemplated by the establishing Act the Institution "can never become self-supporting, or nearly so. Board, lodging and instruction are furnished free to apprentices and as they always form a large percentage of the total number enrolled, the State will always have a considerable amount to pay in order to maintain those learning. As a pure matter of dollars and cents, the blind who need help, like any other class needing help, could doubtless be taken care of more cheaply in poor-houses or in other places where no attention is given to teaching trades. But, if we take into consideration the renewed hope, the regained usefulness, and the brightened lives made possible by such institutions as these, they are doing their fair share of good in the world and are not expensive experiments, as some politicians have denominated them."

At the time of my visit there were in the Saginaw Institution 50 men and 20 women at work in the different departments, and more could be accommodated at very little additional expense. In the broom shop practically all the men and half a dozen of the women were employed. A few of the workers have been transferred from the poor-houses, but most of them were found by means of circulars and by exhibitions of work done at the Detroit and Grand Rapids fairs. The visitors' attendant is a former pupil of the Brantford Institution.

There is one sighted man in the broom factory, whose duty it is to pack and ship the brooms, but the teachers of both the broom-making and the cobbling are blind.

Ex-pupils from the State School for the Blind, who have had previous partial training in the trades, are not regarded as the best workmen in the broom factory, and Mr. Hamilton thinks it is well that the two establishments are in different cities. Blind men do effective work at sorting, winding and sewing, but it was remarked that they could not make brooms on their own account with profit unless they received the retail price.

The house in which the men live is provided with a smoking-room, and with conveniences for games, such as checkers and dominoes. Part of the women's house is used as a work-room, where Mrs. Draper teaches ten women to cane chairs, orders enough to keep them busy being received from the citizens of Saginaw. The women are paid three dollars a week for their work and charged two dollars for their board. Some of them sew and do fancy work. One clever woman, totally blind, is an expert darner; she mends the men's socks and underclothes. The men work by the piece and pay for their board as soon as they get on the pay-roll.

The dining-room for both sexes is in the basement of the Administration building, but the men and women do not take their meals at the same hours.

There is a circulating library in care of Mr. Shotwell, a blind man, with books in line letter, Braille and New York point. The librarian gives lessons in reading, writing and type-writing to those who desire instruction.

The expenditures, which are under the management of the Superintendent and the State Board of Control, amount to about $25,000.00 a year net. So far as possible the materials and goods are bought within the State of Michigan, but without regard to political patronage.

On leaving the Institution Mr. and Mrs. Hamilton very kindly took me for a drive through the city and conducted me to the Manual Training Department of the East Saginaw High School, founded by Mr. Burt, a wealthy citizen. In this most complete establishment hundreds of boys and girls were busy at their work in iron, copper, clay and wood, and the products of their skill and industry were displayed in great variety. Among the other departments are a well-equipped laundry, a gymnasium and a large swimming tank. Such a school would be creditable to a much larger city than Saginaw.

Remarks.

The grading of the pupils in a school for the blind, on the exact plan adopted in the Public Schools for the sighted, is beset with almost insuperable difficulties. Pupils ranging in age from six to sixteen are received who have to begin to learn the alphabet, and some of these are ready for promotion much sooner than others. Some of all ages are intellectually defective or undeveloped it requires time, acquaintance and experiment to know which. Another drawback to regular promotion is that some parents take or keep their children home for the most trifling reasons, thus causing them to fall behind their fellows in the classes. The blind require much more individual teaching than the sighted, especially in such subjects as writing and geography, hence the classes should be small. The Ontario Public School Readers and other text-books are not published in tactile characters, therefore books for pupils' use must be obtained from The American Printing House for the Blind, Louisville, Kentucky. In the endeavor to use Ontario books as far as possible, as in Arithmetic, Spelling, Geography, History, etc., the teacher in our school dictates to the pupils, whereas in the United States schools each pupil is supplied with a text-book from which to study the lessons. The ground covered in the Ontario Institution for

the Blind is substantially the same as in the Ontario Public Schools, with the exception of the Art course, in which the blind can have no part.

A fount of movable New York point type and a proof press, such as are used at the Janesville school, would be more useful to us than a stereotyping outfit.

I have ascertained the cost of an outfit, such as is used in the Michigan school, for teaching the staff notation to blind pupils in music, and expect to obtain one ere long.

If we had more room, and a competent teacher for the purpose, I would recommend the formation of an orchestra, as a recreation for its members, and to give variety to our entertainments, though I cannot certify that ability to play on a portable instrument would be useful to help a blind man earn a living.

With better accommodation, and a teacher not otherwise fully employed, the enlargement of our Domestic Science class, to include all the female pupils over twelve years of age, would be advisable. The comfort and usefulness of the girls on their return to their homes would thus be sensibly increased.

An outfit and teacher for sloyd for the boys would also be very useful. Sloyd is a Swedish word (slojd) descriptive of the system of manual training which originated in Finland. It is not confined to wood-working, as is frequently supposed (though this is the branch most commonly taught), but is work with the hands and with simple tools. The system is adapted to the needs of different grades of the elementary schools, and is designed to develop the pupils mentally and physically. Its aim is, therefore, not special technical training, but general development and the laying of a foundation for future industrial growth. The sloyd class is doing very satisfactory work at the Wisconsin school, and its usefulness as a preparation for piano repairing, basket or broom-making, or any occupation of a mechanical character is obvious.

With regard to work for adults, I was most favorably impressed with the experiment being made at Milwaukee, where the manufacture of willow-ware on piece wages is carried on, the workmen finding their own boarding places. Sighted superintendence and instruction are desirable.

Boston Convention of Workers for the Blind.

On the invitation of Charles F. F. Campbell, Superintendent of the Industrial Department, Massachusetts Commission for the Blind, and with your permission, I attended the Boston Convention of the American Association of Workers for the Blind, held at the Kindergarten for the Blind, Jamaica Plain, during the last week in August, 1907. At every session of the Convention, which lasted four days, there was a large attendance of "workers," both blind and sighted, most of whom took part in the discussions. Rev. Charles H. Jones, Ex-Superintendent of the Connecticut Institute for the Blind, presided at the first session on August 27th. After prayer, he called upon General Francis H. Appleton, President of the Perkins Institution and Massachusetts School for the Blind; Miss Helen Keller, representing the Massachusetts Commission for the Blind, and William P. Fowler, Vice-President of the Massachusetts Association for Promoting the Interests of the Blind, to deliver addresses of welcome.

General Appleton, after courteous words of welcome to Boston, remarked that the Perkins Institution, although among the oldest in the country, was always seeking methods of improvement, and he made a graceful reference

to the recent transference of Superintendent Allen from the Pennsylvania to the Massachusetts Institution.

Mr. Fowler said the great aim of the Association which he represented was to interest the people in the condition and needs of the adult blind, and to promote industrial education.

Miss Helen Keller spoke at some length, her sentences being repeated to the audience by Mr. Macy, as some of the words were indistinctly uttered. She said in part:—

"Ladies and Gentlemen,—In behalf of the Massachusetts Commission for the Blind, I welcome to Boston this Association of workers for the sightless. The purpose of our Convention, which represents every movement to better the condition of the blind, is to secure co-operation between the institutions and societies which are concerned in our problem. I know that good will come of our taking counsel together. I feel that we have the fair-mindedness to look at facts squarely, and the courage to set out hopefully on the long road which stretches before us.

"Our problem is complicated, and has more sides than isolated effort, however zealous, can compass. We must see to it that in the diversity of interests one class of the blind is not overlooked for the sake of another, or any part of the work undervalued. The workshop, the library of embossed books, the home for the aged blind, the nursery, the kindergarten and the school are seen to be parts of a system with one end in view. I rejoice that there is assembled here a company of men and women determined to take to heart all the needs of all the blind, and in the name of the blind, and of the State whose Commission I represent, I bid you welcome.

"We have been forced to realize the shortcomings of our system, or lack of system, wherein faithful workers go in opposite directions, each hugging a private book of embossed type, or the plans of an institution which is to be the best and only seat of salvation for the blind. Let us draw our forces together. However we differ in the details of our work, let us unite in the conviction that the essential thing is to give the blind something they can do with brain and hand. The higher education, in which some of us are particularly interested, depends largely on early training in childhood, on healthy surroundings at school, on physical happiness, abundant play and outdoor exercise.

"Beside the blind, for whom existing institutions are intended to provide, there is a numerous class of active, useful men and women who lose their sight in mature years. Those who are in the dark from childhood are hard pressed by obstacles. But the man suddenly stricken blind is another Samson, bound, captive, helpless, until we unloose his chains.

"This Association may become an organized power which will carry knowledge of the needs of the blind to every corner of the country. It may bring about co-operation and good-will between schools, associations and all sincere workers for the sightless. It may start or stimulate efficient work in States which are yet in original darkness. Blindness must always remain an evil, whatever we do to make it bearable. We must strike at the root of blindness and labor to diminish and prevent it.

"The problem of prevention should be dealt with frankly. Physicians, as we are glad to see they are doing, should take pains to disseminate knowledge needful for a clear understanding of the causes of blindness.

"The time for hinting at unpleasant truths is past. Let us insist that the States put into pratice every known and approved method of prevention, and that physicians and teachers open the doors of knowledge wide for the people to enter in. The facts are not agreeable reading, often they are

revolting. But it is better that our sensibilities should be shocked than that we should be ignorant of facts upon which rest sight, hearing, intelligence, morals and the life of the children of men. Let us do our best to rend the thick curtain with which society is hiding its eyes from unpleasant but needful truth.

"No organization is doing its duty that only bestows charity and does not also communicate the knowledge which saves and blesses. We read that in one year Indiana has appropriated over one million dollars to aid and increase institutions for the blind, the deaf, the insane, the feeble-minded, the epileptical. Surely the time has come for us to ask plain questions and to receive plain answers. While we do our part to alleviate present disease, let us press forward in the scientific study which shall reveal our bodies as sacred temples of the soul. When the promises of the future are fulfilled and we rightly understand our bodies and our responsibilities toward unborn generations, the institutions for defectives, which are now our pride, will become terrible monuments to our ignorance and the needless misery that we once endured."

The general subject for the forenoon discussion was "Preparation for Graduate Life." Dr. C. F. Fraser, Superintendent of the School for the Blind, Halifax, Nova Scotia (himself blind), read a paper on "Graduates of Schools for the Blind and their Needs." The following sentences are extracted:—"In considering the needs of our graduates, a few preliminary remarks as to the training given in schools for the blind may not be out of place. The officers and teachers in schools for the blind should be enthusiasts in their particular line of work. They should endeavor to impress upon their pupils a strong spirit of self-reliance, and faith in the idea that the world has work for them to do. The mental, moral and physical training given in many schools for the blind is admirable, but in some schools it fails, in that it is not specific and definite. Each pupil requires special study upon the part of Superintendent and teachers. The weak places in his character or physique must be strengthened, his manners and habits duly considered, his mental aptitude fully gauged, and his training such as to insure a practical knowledge of at least one occupation which has a commercial value in the world.

"The choice of a locality in which to settle is of the utmost importance to a graduate of a school for the blind. Those who are blind are, as a rule, more successful in communities where they can become well known. Populous cities and sparsely settled country districts offer few opportunities of employment to the graduate of average ability. The choice of a locality should generally be made in the smaller cities, towns and villages.

"A blind person cannot make a successful start in life without money in his pocket. I established a modest loan and aid fund of $1,000 to assist graduates in good standing. The advantage of such a fund has, year by year, become more apparent to me, and although the individual loans were not large I believe that many of our graduates would have failed to succeed had it not been possible to place within their reach the necessary financial assistance."

Dr. Fraser remarked that one might have a good literary education and still not know anything which would assist in obtaining bread and butter. The ability to play the piano was secondary in importance to the ability to teach the piano. He spoke of the qualifications necessary to success in piano tuning and those needed for commercial work.

"To sum up:—Our graduates need specific training, they need to select with care the locality in which to reside, they need to have money in their

pockets, they need to be properly introduced, and they need to identify themselves with local organizations. These needs being met, we should have no fear as to their success, provided their industry and the quality of their work merit the support and encouragement of their fellow citizens."

A paper on "A Business Course an Essential Part of the Curriculum of Schools for the Blind," prepared by Albert G. Cowgill, of the Pennsylvania Institution for the Instruction of the Blind, was read by Superintendent E. E. Allen, of the Perkins Institution. It embodied suggestions as to the fundamental importance of education from the standpoint of the economic relations involved. In teaching business to a class, Mr. Cowgill reviews the arithmetic work, teaches book-keeping, political economy, commercial geography and practical business, including salesmanship. He heartily approved of keeping in touch with graduates, as is done by the visitations of Liborio Delfino, the Field Officer of the Pennsylvania Institution.

The discussion on these papers was opened by Miss Christine LaBarraque, of California, a blind lady who was born in France, but came to the United States in childhood and entered the California School for the Blind. After graduating she took the regular academic course at the University of California, and later studied at the Hastings Law School, teaching languages in the public night schools of San Francisco at the same time. Miss LaBarraque is the first and only blind woman who has ever been admitted to the American bar. She took a thorough musical course at the New England Conservatory of Music, and spent a winter in Florence studying with Senors Vannuccini and Panzani. She speaks with fluency English, French, Spanish and Italian. Her address to the Convention was brief but appropriate.

Dr. Allen, of Massachusetts, told about the method he had adopted in the Pennsylvania School of paying pupils for caning chairs, and having part of the money deposited in a bank to be withdrawn when the pupil leaves the school.

John B. Bledsoe, Superintendent of the Maryland School, described his method of paying pupils, which differed from the one followed by Mr. Allen.

O. H. Burritt, formerly of the Batavia, N.Y., School, but now of Overbrook, Pa., spoke of teaching the pupils to grapple with the problems of life, to do something in vacations to earn money, etc. He told of the placing of graduate piano tuners in situations.

Dr. F. J. Campbell, of the Royal Normal College for the Blind, London, England, who lost his sight at the age of four years, said that he was always on the lookout for chances to place his blind organists and tuners, and when he heard of an opening he went for it.

I had been appointed, with two others besides those named above, to take part in this discussion, but as the hour of adjournment was approaching when I was called upon, I spoke rapidly and briefly on only a few of the topics that had been mentioned. I referred to the necessity of care in the selection of the pupils who should be taught piano tuning, as men of slovenly appearance, bad manners or lazy habits could not obtain or retain employment. When the Ontario Institution had a young man properly trained as a tuner, an effort was made to get him a place in a piano factory, not only because blind men were better adapted for factory work than for custom work, but because after all their experience with old pianos in the school they needed practice on new pianos. I added that the placing of competent tuners gave me little trouble in these prosperous times, when thousands of pianos were being made and sold every year; nor did I have to worry about the pay they got. I could name many tuners—graduates of the Institu-

tion—who were receiving high wages; many of them heads of families and property owners. But I wanted to find out, if possible, how to profitably employ the young men who could by no method known to me be trained for musicians, teachers or tuners. We had to take some children from the very borderland of imbecility, and give them a fair and sometimes prolonged test to ascertain if the state in which we found them was the result of mental deficiency or of parental neglect; these, and others a grade above them intellectually, would never become tuners or teachers if they had their sight, yet they must eat as regularly and as much as those who could earn high wages. Add to these the many blind who lost their sight in adult life by accident or otherwise, and there confronted us a far more difficult problem than was involved in locating tuners. The sighted man of sub-ordinary mental capacity could always fall back on unskilled labor, but the blind man could not wield the pick or shovel. I mentioned my visits to the workshops for blind adults in Milwaukee and Saginaw, and said that I was anxious to see similar shops established in Ontario. I approved of the idea of keeping in touch with the ex-pupils of schools for the blind, and described the means I had taken to locate and hear from those who had left the O. I. B., sending them reports and marked newspapers, answering all their letters promptly and getting them on the circulating library list. Alluding to the recommendations of former speakers that pupils should be taught self-reliance, I suggested that there was a happy mean between the extremes of conceit and humility, and I thought it better for the pupil to leave the school with a correct conception of the difficulties to be confronted than to live in a fool's paradise during the years at school and encounter bitter disappointment in the world of labor and business. I argued that pencil writing should be taught as well as point and typewriting, and the blind men and women in the audience showed their warm approval of that contention.

After luncheon the members of the Convention went by street cars to visit the salesrooms of the Perkins Institution and the Massachusetts Commission for the Blind, at 383 Boylston street, where mattresses, curtains, rugs, etc., are exposed for sale; also the office of the State Commission for the Blind in the Ford Building, near the State House. Then all repaired to a reception given by Miss Annette P. Rogers and Miss Annie E. Fisher at Miss Rogers' home, No. 5 Joy street, in honor of Superintendent Edward E. Allen and Mrs. Allen, who had lately come to the Perkins Institution. This afforded a fine opportunity to become acquainted with the members of the Convention and to talk over the topics of the forenoon session.

At the evening session, Dr. Edward M. Hartwell, Chairman of the Massachusetts Commission for the Blind, presiding, the subject for discussion was "Prevention and Reduction of Blindness."

Dr. F. Park Lewis, of Buffalo, Chairman of the New York State Commission for the Blind, gave an address and read a paper on "Prevention of Unnecessary Blindness a Public Duty," saying in part:—

"There is no doubt whatever that from thirty to forty per cent. of those who are blind need never have become so had proper measures been taken at the right time to prevent this affliction.

"With much of the unnecessary blindness we may not here concern ourselves, but when young infants, who come into the world normal in every particular, have their eyes destroyed as the result of an avoidable infection, the failure to use the simple measures that will prevent it and to warn those who should know what to do, but fail to do it, becomes a crime, for which you and I are responsible. Ophthalmia neonatorum or inflammation of the eyes of new-born babies is one of the commonest and at the same time one of

the most dangerous maladies of the eyes to which the child is subject. It is not confined to the tenement house district, it may occur in any class of society. Twenty-four years ago, Professor Crede, of Leipsic, made a great discovery for which some day the whole world will unite in doing honor to his memory. At that time he made the announcement that by allowing a small drop of a two per cent. solution of nitrate of silver to drop from the end of a tiny glass rod upon the eye-ball of a new-born child, the microbes of infection were destroyed and the eye itself was uninjured. If this great discovery of Crede's were uniformly employed, the chief cause of blindness throughout the civilized world would be abolished.

"Many babies have had their light extinguished forever because of the carelessness or neglect of someone who should have known, but did not, and should have cared enough, but did not, to put one drop of the simple, but necessary, prophylactic in the eyes of the child in time to save him from such a fate. About one-quarter of the children in all of the schools for the blind have lost their sight from this cause.

"The plan to which the American Medical Association has given its approval provides for a perfectly organized movement covering the whole United States from Maine to Alaska and from Canada to the Gulf. It includes the appointment of committees from each State Medical Society, and through these from every county society in America, these to follow a definite plan of campaign which shall be given with the authority and approval of the National Ophthalmological and Obstetrical Associations."

Dr. Lewis spoke of the general employment of midwives by the foreign population in the large cities, many of whom were too ignorant to apply the proper measures for the prevention of ophthalmia neonatorum, and even when a physician was called he was sometimes in too much of a hurry to look after the infant's eyes.

The paper was discussed by several Boston physicians. When an invitation was given for general discussion, I stated that I had noticed in several of the reports of English and German institutions for the blind a page of directions for preventing ophthalmia neonatorum, and in view of the ignorance of midwives and the neglect of physicians described by Dr. Lewis, I would suggest that a brief statement of preventive measures, approved by the medical profession in America, should be printed in the annual reports of all the American schools, and steps taken to have the same copied by the newspapers, so that the warning of danger would be conveyed to fathers and mothers as well as to doctors and midwives. The following is a sample of the directions I had in mind when speaking: —

Prevention of Blindness.

(From the Report of the Royal Glasgow Asylum for the Blind.)

The Managers being painfully impressed with the fact that loss of sight might have been prevented in the case of many of the persons who come before them for admission, are anxious to make the fact known as widely as possible that one of the most common causes of blindness is infantile inflammation of the eye; and the majority of the cases are due to contagious discharges getting into the eyes during or soon after birth, but if dealt with at once the sad results of blindness may be prevented.

The essential precautions are: —

1. Immediately after the birth of the baby, and before anything else is done, wipe the eyelids and all parts surrounding the eyes with a soft, dry

linen rag; soon afterwards wash these parts with tepid water before any other part is touched.

2. Avoid exposing the baby to cold air; do not take it into the open air in cold weather; dress the infant warmly and cover its head, because cold is also one of the causes of this eye-disease.

When the disease appears it is easily and at once recognized by the redness, swelling and heat of the eyelids, and by the discharge of yellowish-white matter from the eye. Immediately on the appearance of these signs seek the advice of a medical man; but in the meantime proceed at once to keep the eyes as clean as possible by very frequently cleansing away the discharge. It is the discharge that does the mischief.

The cleansing of the eye is best done in this way:—

1. Separate the eyelids with the finger and thumb, and wash out the matter by allowing a gentle stream of lukewarm water to run between them from a piece of rag or cotton-wool held two or three inches above the eye.

2. Then move the eyelids up and down and from side to side in a gentle rubbing way, to bring out the matter from below them; then wipe it or wash it off in the same manner. This cleansing will take three or four minutes, and it is to be repeated regularly every half-hour at first, and later, if there is less discharge, every hour.

3. The saving of the sight depends entirely on the greatest care and attention to cleanliness. Small pieces of clean rag are better than a sponge, as each rag is to be used only once, and then burned immediately; sponges should never be used, except they are burnt after each washing.

4. A little washed lard should be smeared along the edges of the eyelids occasionally, to prevent them from sticking.

Special Warning.—Of all the mistaken practices which ignorance is apt to resort to, none is more ruinous than the use of poultices. Let them be dreaded and shunned as the destroyers of a new-born baby's sight. Tea leaves and sugar-of-lead lotions are equally conducive to terrible mischief, stopping the way as they do to the only right and proper course to be taken.

Dr. Anna G. Richardson read a paper on "Advantages of After-Care and Social Service Work for Patients from Hospitals for the Treatment of Diseases of the Eye."

William P. Fowler, Vice-President of the Massachusetts Association, being called upon, explained that the Society of Workers for the Blind had started on two separate lines, one in the interests of the adult blind, and one for the technical and industrial education of those who would otherwise burden the State.

At the Wednesday morning session, Dr. E. E. Allen presiding, the topic was, "Organized Work for the Blind."

Dr. F. Park Lewis, Chairman of the New York Commission for the Blind, said that when he began to take special interest in the blind, fourteen years ago, he noticed that adults had encroached upon the schools designed for blind children; fully one-quarter of the "pupils" in attendance were over twenty-one years of age, and some of these were quite unfit to associate with children. Others, though within the school age, were defective in intellect. Pains have been taken to exclude these two classes as far as possible. Then the State must make other provision for blind adults. The first thing was to find out how many blind there were in the State, who they were, what they did or could do, whether they wanted to work, etc. A Commission was appointed in 1903 to collect the information and report. About the same time the Massachusetts Commission was appointed and the two compared notes and worked on similar lines. In

1906 a second New York Commission was appointed and $5,000.00 was appropriated to take a census of the blind of the State, with such particulars as could be obtained. The New York Association for the Blind had done much of the work and had given great aid to the Commission, much of the statistical work having been performed by Miss Edith Holt. A permanent Commission was required in every State, (1) to find the young blind, (2) to find the adult blind, (3) to put each class in its proper place, (4) to take proper care of them afterwards.

Superintendent O. H. Burritt, Secretary of the New York Commission, said that 5,800 blind persons had been located in New York State and the records of 5,310 had been tabulated. It had been found necessary to call at ten places to locate six blind persons. The Commission had concluded that provision should be made for the prevention of blindness and for the betterment of the condition of the several classes of blind, who might be thus divided:—(*a*) Those from infancy to the fifth year; (*b*) Those of school age: (*c*) Those from 21 to 50 (working age), and (*d*) Those over 50. Mr. Burritt exhibited some of the sheets of figures, which had been prepared with immense labor by the Misses Holt. No provision had been made for infants under eight years of age, except the Sunshine Home in New York, which cares for 18 children. The State school at Batavia was overcrowded. Kindergartens were needed to prepare little ones for the schools. He could suggest many improvements for the schools, such as a swimming tank in connection with the Batavia school gymnasium. There was need of a higher educational standard; the work of the blind needed to be better than that of the seeing. The mentally weak should be separated from the normal children. He favored early enrollment in the schools, which could be secured by the co-operation of the home teachers and the field officers, but not by a compulsory law. Forty-five per cent. of the blind were between the ages of twenty and fifty, therefore adult workshops were needed, not necessarily large ones, but they should be situated in centres of dense population, and there should be separate shops for each sex. These shops should be run on business principles, not filled with incompetents, and it should be understood from the beginning that they will not be self-supporting, but will require supplemental help. In the shops there must be provision to regularly employ the blind able to work, after their tutelage is ended. Mr. Burritt spoke approvingly of the work of the field officer in Pennsylvania, and the work of the home teachers in Massachusetts and Rhode Island.

Mr. G. W. Conner, of the Maryland Commission for the Blind, said that $3,000 had been appropriated for the expenses of the Commission. The Legislature had authorized the expenditure of $50 per capita to get the blind started at work, and $200 had been appropriated to provide a home for an indigent blind woman. Mr. Conner had been deputed to canvass the eastern shore of Maryland, including nine counties, and he had found there 50 children blind or deaf, and 150 blind adults. Altogether in the State 309 adult males and 214 adult females had been reported on; 75 were earning their living, 75 a partial living, ten per cent. were in easy circumstances; 23 persons were in the alms-houses; a large percentage were living in idleness, depending on friends for their support; half of the blind were between the ages of 18 and 50. The Commission had not decided what to recommend to the Legislature. He (Mr. Conner) thought the workshops should be removed from the school and made a distinct centre, and that work done in the homes of the blind should be sent to the shops for sale. Home instruction was necessary. It is impossible for a blind man to earn as much as one

who sees, therefore the expenses of running the shops must be met by outside aid. At the school broom shop, 15,000 dozens had been made, but it would do better taken away from and kept separate from the school.

Dr. E. M. Hartwell, Chairman of the Massachusetts Commission, said that the Connecticut and Michigan Commissions for the Blind antedated the others. A careful comparison showed that the experience of any State would apply to the other States. The Massachusetts Commission, as at present constituted, consisted of five members and was thirteen months old. Its work covered the collection and registration of information and the establishment of industries. Workshops have been established and there are also industries in connection with the State school. Census taking is an art, the difficulty of which is not comprehended until one tries it. The Commission encouraged home teaching. $5,000 a year had been appropriated for several years for the expenses of the Commission. The home teachers gave lessons in reading and simple handicrafts. In 1903, the women of the State consulted the Governor, who recommended that definite information about the blind should be obtained. A Commission of three members was appointed, who met the New York Commission, and the two gave mutual help. He had found that a ten minutes' look through an institution was more useful than a tome of letters and reports. He had visited twenty institutions. The schools for the blind were old and popular, but they had not the necessary facilities for caring for the adult blind. The latter got shops when they personally demanded them. The attitude of the schools, especially in the last five years, was scholastic. There was no antagonism between the schools and the shops, for there was work and a field for both. The Massachusetts agent had studied 500 cases of blindness, and his findings had been compared with those of the national census. The decision was that the adult blind had been neglected; they needed occupation; employment amongst their friends if possible, or a chance to earn wages in a shop. The aged blind should be provided with comfortable homes for the decline of life, but segregation was inadvisable. There was no great popular interest nor knowledge about the blind, even among medical men. The Commission was considering the cases of blind infants who required care, and those of blind women who sent in crochet work, etc., from their homes to be sold, and it desired to get full statistics about the blind, young and old.

Mr. William Lynch spoke for the Maine Association for the Blind, all of whose members are blind, saying that the seeing people were willing to do what the blind themselves asked for. The latter must take the initiative. The Association was formed in 1903.

Miss Harriet Rees, Secretary of the Scotoic Aid Society of Missouri, said that she used to be a Kindergarten teacher, but being promoted six years ago to another position, the question was forced upon her, "What must be done for the blind after they leave school?" Shall they be turned out to sink or swim? She went to London, where she was engaged in research work in the British Museum, and she sent home reports of the work done for adults in Britain. Sixty-five of the best names in St. Louis were on the subscription list of the Scotoic Aid. She knew of a millionaire who wanted to do something for the blind. The first need was a factory for the men, not a home, but a workshop, which should be half or more than half self-supporting.

Miss Winifred Holt, Secretary of the New York Association for the Blind, opened with a reference to the Home for Blind Babies in Brooklyn, and to the pension paid by the city of New York of $50 a year to blind adults having no other means of support. Nine out of ten of the blind became

blind after they had passed school age. She described the formation of the New York Association, which was incorporated in 1906. They were studying to ascertain what was being done for the blind in all countries; how to prevent blindness, as had been told by Dr. Lewis; safety devices to prevent the loss of sight by accidents in blasting, manufacturing, etc. Before admission to their shop a medical examination was required, to guard against tuberculosis. The work was making brooms and caning chairs. She hoped to see a shop for blind women. Now they are taught and material is provided for them at their homes. All the home teaching is done by blind people, who do it better than seeing people (cheers). Among available work for blind women are handling the telephone switchboard and making cardboard boxes. The Association is opposed to segregation of the blind, and aims to encourage normal life in private homes. The city is laid out into districts; there are some unofficial services, such as donating food and clothing to meet an emergency. There are numerous projects for the future —a blind self-improvement club, a blind women's club for the cultivation of pleasure and beauty; a ticket bureau; dancing, skating, an information bureau, a depot of supplies. The concerts encourage the use of the tooth brush and the shoe brush. There are now five blind switchboard operatives in New York, two in hospitals, two in business houses, one in the editorial room of a great daily paper. This industry for the blind was originated in a private house. (Miss Holt told an amusing story of a visit from the manager of an establishment where one of her blind girls was employed at a switchboard. She expected to hear some fault found with the work, but the manager merely suggested that the girl should wear a less vivid blouse).

Mr. Samuel Hubbard, Secretary of the Massachusetts Association, recalled how the ladies of Massachusetts camped on the State House steps to secure the first Commission for the Blind. It was found that publicity was needed and Mr. C. F. F. Campbell was employed as field agent. After the Commission was re-appointed, attention was drawn to the limitations of the blind in industrial work, and an experimental station was established to ascertain what the blind could do. Some blind people are now working in factories with the sighted. The Legislature last year made the Commission permanent. Mr. Hubbard defined the relative duties of the individual and the State, and affirmed that a State or a city could be pauperized by doing for it what it should do for itself. The Massachusetts Association loaned out small sums for times of stress.

In the afternoon the members of Convention visited Harvard University, and afterwards inspected the Cambridge workshops of the Massachusetts Commission. They found blind men at work under sighted supervision, making brooms, rugs and mops. The rugs were of the "rag-carpet" style, but were made entirely of new material, and in neat patterns. On my remarking that they could not be sold at the prices quoted in any place with which I was acquainted, I was informed that many wealthy people, who were interested in "Arts and Crafts," would buy almost anything, provided it was made by hand. The rugs were used in summer residences at the seaside, the colors being chosen to match walls and furniture.

Afternoon tea was served at Mr. Campbell's residence, where curtains and other articles made by the blind were displayed.

At the evening session, E. J. Nolan, LL.B., presiding, the first topic was Libraries for the Blind, discussed by Miss E. J. Giffin, of the Congressional Library, Washington, who told about the apartment set apart for the blind to read in; Miss E. R. Neisser, of Philadelphia, and Miss Jennie Bubier, of Lynn, Mass. Miss Lucy Wright, Superintendent of Registra-

tion and Information of the Massachusetts Commission, discussed Field Work and Co-operation. Mr. Liborio Delfino, Field Officer of the Pennsylvania Institution, described at length his methods of finding and getting acquainted with the adult blind, many of whom could hardly be convinced that they could learn to read; incidentally, he located many blind children and got them into the school at Overbrook.

"Home Teaching" was discussed by three Home Teachers, Miss Virginia Kelly, of Maryland; Miss Fanny Kimball, of Rhode Island, and Mr. John Vars, of Massachusetts.

Rev. Henry N. Couden, Chaplain of the U. S. House of Representatives, was to have presided at the morning session on Thursday, but in his absence the chair was filled by Mr. Burritt. The topic was "Occupations for the Blind."

Superintendent Joseph Sanders, of California, opened the discussion on broom-making. He said that the blind of California got $40,000 twenty-three years ago to found a home for the teaching of trades, and he was asked to go there to teach. He has been in the New York and Boston schools as a pupil, and in the Philadelphia shop as a workman. Much effort had been made (and wasted) in trying to make a musician of him; his forte was buying and selling, but that was not discovered while he was a pupil at the blind school. Now the California shop makes 50 dozens of brooms per day, and when the new shop is completed it is expected to make 400 dozens. Application had been made to the Legislature for $50,000 for a new dormitory. There were 70 to 80 men and 20 women at work, and there was a home for the aged blind who were unfit for work. All classes, provided they were of good character and mentally and physically fit, were admitted. Making brooms, said Mr. Sanders, is the trade for the blind; they can do it all and sell the goods. He got the same price for brooms made by the blind as was paid for brooms made by sighted labor. His brooms were exported to the Phillippines and to Japan, and so great was the demand that he could not supply it. The women were also employed, the men's and women's shops being 150 feet apart. They pay part of their support. They get half of their wages, and the rest goes toward their maintenance. A girl will earn from $3.00 to $17.00 per month at chair work. He ran a shop, but he had nothing to say against the schools; he thanked the schools for what they had done for him, though they could not make him a musician or a tuner. Pupils should be sorted out, and those who were intended for salesmen or drummers should be trained accordingly. In his shop the girls make toy and whisk brooms; all the Pullman cars west of the Rocky Mountains are supplied from his shop; the orders for brooms are 500 dozens in arrears.

Superintendent R. E. Colby, of Connecticut (a sighted man), said there was no doubt about the practicability of broom-making for the blind, but everything depends upon the individual. When it was possible, they sent the blind man back to his own town to work. They taught chair-caning and mattress-making as well as broom-making. The State spends up to a maximum of $200 per man for tools and supplies; afterwards supplies materials at cost. He could name men who supported families by their labor at the broom trade.

Superintendent C. S. McGiffin, of Indiana, said the Industrial Home for the Blind, of which he had charge, had made 5,065 dozens of brooms; there were 20 on the pay roll; with more capital and more skilled labor the shop could be self-supporting. Some of the men earned six to eight dollars per week; others only one or two dollars per week. Some of them peddled brooms. The place was a workshop, not a home. The men take care of

themselves out of shop hours. He preferred to have it so. It was not well to locate in crowded districts, but in suburbs, where rents were lower. In a seeing broom factory the cost of labor in relation to product was 40 to 50 per cent. lower than in the blind factory. He started his work in 1900 with only $200. He begged money to put up his buildings on land that was donated. Last year he had a deficit of only $600.

Superintendent E. P. Morford (blind), of Brooklyn, said the blind must indicate what they wanted, then the sighted people would assist to obtain it. The blind should be experts in their work, and very particular about their personal appearance. The Brooklyn Industrial Home was started by blind people as a private enterprise; it receives no State aid. Brooms and mattresses are made, chairs are caned, and net-weaving is done in the evenings. There are four operations in making a broom, and the men earn seven to nine dollars per week. Chair caning keeps blind people out of mischief; they earn only three to five dollars per week, but some of them prefer it. At the Home a nominal price of $2.75 per week is charged for board, but they do not all board there; some prefer to take quarters outside, drawing the $2.75 in cash. He claimed a profit of $1,500 from his business.

Mr. Judd, of Saginaw, who has recently succeeded Mr. J. P. Hamilton as Superintendent of the Michigan Employment Institution, described the shops and dormitories, and said the 80 inmates made brooms and caned chairs. The men paid $2.50 per week for board; the women $2.00. He had come east to find some occupation for blind girls.

Mr. S. M. Green, of St. Louis, Superintendent of the Missouri State School for the Blind, said that some of his boys had done well making brooms at home, raising their own corn. The boys in the school get the proceeds of their own work; one made $68.00 last year; another $53.00. Two good blind broom-makers have become salesmen; they took a business course. Five years ago, he had visited the shops in Edinburgh, and on his return he had tried the willow trade, but the material cost too much. The schools were trying to do their best, but many a boy was at the piano who should be learning to make brooms. The work should be fitted to the individual. He had experimented in book-binding, with the books used by the blind. The hand-sewing could be easily done by blind men and women.

Miss M. Campbell, of Cleveland, Ohio, one of the workers at the Goodrich House Settlement, told of a modest weaving shop at Cleveland which has done most encouraging work. They had a summer school. A seeing blacksmith, who had a genius for weaving, got a place in a rug factory and learned the business. A young woman who had previously done bead work bought her own loom. The organization took place last fall. They had no Arts and Crafts Society to help them, but had to educate the public to buy hand work. They did not do the most elaborate weaving, but simple work like their grandmothers used to turn out. The market was increasing.

E. J. Nolan, a blind lawyer of Chicago, spoke for the Illinois Industrial Home, of which he is a trustee. They had a broom shop, but nothing for women to do except home work. At crocheting baby hoods, a woman could earn only sixteen cents a day; they never seem to acquire speed. They were experimenting on wire hat frames. At first, after the blocks were ordered, the work was very slow. Now girls can earn sixty to ninety cents per day. Six hundred thousand dozens of these frames are made in Chicago every year, mostly in four months of the year. The trade is confined to large cities only.

Charles F. F. Campbell, Superintendent of the Industrial Department of the Massachusetts Commission for the Blind, called attention to the "Out-

look for the Blind," the quarterly magazine which he edits in behalf of the cause. Mr. Campbell's topic was "Work for the Blind among the Seeing," in which he brought out the necessity of seeking work along the lines of industry in factories where seeing people are employed. He had made a special investigation along this line three years ago for the Massachusetts Association, and claims to have demonstrated the possibility of securing employment for blind and partially blind men and women in workshops where seeing employees were working. Mr. Campbell referred to the recent installing of a telephone switchboard at the Cambridge shop of the Commission which they were planning to use for the instruction of partially seeing operators. It is beginning to be a well recognized fact that young women with partial or no sight have successfuly operated branch exchanges or even central switchboards in country towns for the past seven years. In referring to the hand-weaving which is being done at the Commission's shops, he emphasized the imperativeness of holding the work up to the highest standard. You cannot make all the blind do the same thing, said Mr. Campbell, any more than you can make all men lawyers. He held up a black piano key, showing that it was shaped on a sandpaper wheel, by a girl, and a blind person could do it. The willow business succeeded in England because willow was cheap there, but it is dear in America. He had a high opinion of broom-making as an industry for the blind. He said the blind could make bicycle clips, and could bend hair-pins, and cut cards for boxes. It was better for them to work in shops with seeing people than to work in subsidized shops with other blind people. The blind could stem tobacco, but it was a poorly paid trade. He told of one man who made two dollars a day assembling wooden boxes. At first he earned only three dollars a week. That man had some sight. He spoke again of the telephone switchboard, urging that private branch exchanges could be operated by the blind. The weaving was simply an experiment; they hoped to develop a home industry. There was defective material in all the schools; boys who could never get into the high school if they had sight. A separate institution was needed for them. Above all, a farm was needed for the blind deadwood, for there was a dearth of farm labor.

Charles W. Holmes (blind), Deputy Superintendent of the Industrial Department of the Massachusetts Commission, explained how he was carrying on the same work which had been done on that line by Mr. Campbell, in the policy of helping the blind to find positions not only in workshops for the blind, but in factories for the seeing. The employment agent has to meet and overcome many obstacles, some imaginary, which his very affliction involves. These conditions prove disheartening, and an agent has to deal with and solve many of these problems. The possibilities of employment for the blind seem to divide themselves into three general classes—first, work among the seeing under conditions as nearly as possible like those of his brethren; second, work in groups of other blind persons, where difficulties which stand in the way of his following the first line are understood and provided for in a helpful way, instead of becoming an inevitable cause of early dismissal. Third in line is home industry, which should be made as broad as possible, carried on with the help of the blind person's family. These different lines of work the speaker considered at some length and the conditions under which they may be carried on were described.

When the topic was presented for general discussion, I obtained leave from the Chairman to ask Mr. Campbell a question with regard to his closing statement that "a farm was needed for the blind deadwood, because there was a dearth of farm labor." I asked him to tell the Convention what a

blind man could do on a farm that would be worth board and modest wages —say ten dollars a month. I knew of healthy, strong blind men, sons of farmers, working at the willow trade in a little shop over the carriage house, whose help at the ordinary farm work would be welcomed if they were told what they could do. If a blind man so defective that he could be fairly classed as "deadwood" could affect the farm labor problem, how much more valuable would a healthy, intelligent blind man be. Assuring Mr. Campbell that I spoke in the spirit of inquiry and not in the spirit of criticism, I declared that if he would give me in detail the information I asked for about farm work, I would not need what he had given about willow, brooms or piano keys, for the farmers in Ontario were quarreling at the railway stations for the privilege of hiring green immigrants from Europe, and if blind men could be substituted for these the problem of employing the blind, which had long been a puzzle to anxious inquirers, would be solved. But what could the blind man do on the farm? Could he plough, sow, harrow, hoe corn, reap, bind, load grain, drive horses, feed and milk cows, feed pigs, sheep, chickens, make fences? That he could do one thing was not enough. The farmer expected his hired man to be busy and useful from daylight to dark. Could the blind man fill the bill?

As the hour of adjournment was at hand, the promise was made that a subsequent opportunity would be given to discuss this question. It was a fertile theme of conversation during the recess, but up to the time when I was obliged to leave Boston it had not been reached in regular session.

In the afternoon a visit was made to the Perkins Institution, one of the oldest schools for the blind in the United States. Superintendent Allen gave a short address in the chapel, outlining the history and work of the school during the last 75 years. The library and museum, the gymnasium and class-rooms were inspected, and tea was served in the Superintendent's apartments. The cottage system prevails at Perkins. On entering the school, a pupil goes into a house to live and remains an inmate of that house until the time comes to leave. There are sixteen pupils, a house mother and one maid in each cottage. Both boys and girls are taught to help in the housework, and many of them become greatly attached to their cottage homes. The Perkins workshop is across the street from the school, and though it is owned by the Perkins corporation, the management is quite distinct. Mr. Dennis Reardon, a blind man, is in charge, and he has sighted assistants to teach broom and mattress-making, the renovation of feathers and manufacture of pillows, etc. The shop is not self-sustaining.

At the evening session, Charles F. F. Campbell presiding, Mrs. Chapman, of Dayton, Ohio, told how the law for giving pensions to the blind of her State had been declared unconstitutional, whereupon an association was formed to find employment for the blind. It was ascertained that there were 78 blind persons in Dayton city and 122 in the adjacent county. Besides experimenting in various lines of work, the association provided entertainments for the blind.

Mrs. E. H. Fowler, of Worcester, Mass., discussed the "Desirability and Requirements of Homes for Blind Women," arguing that they should not be too large nor too small; each "Home" should contain two blind for one sighted person.

Mrs. E. W. Foster, of Hartford, Conn., Miss Isabel Greeley, of Boston, and Mrs. Cynthia M. Tregear, of Brooklyn, N.Y., spoke on "Nurseries for Blind Babies," one of them stating that there were only three nurseries for blind babies in the world. The babies graduate from the nursery to the Kindergarten.

In Lilac Time, O. I. B. Grounds.

Superintendent Joseph Sanders, of California, spoke on "Boarding in an Institution *vs.* Boarding Outside," the word institution being meant for a shop or home, not a school. Mr. Sanders said the aged and infirm were kept in the home connected with his shop, but they should be segregated from the workers. Most of those in the home were very willing to work in the shop; the workers could live outside if they preferred it, but generally they preferred the home connected with the shop.

Mr. McGiffin, Mr. Morford and Mr. Reardon took part in the discussion, and Mr. Burritt asked many pertinent questions which were satisfactorily answered.

At the Friday morning session, Charles W. Holmes presiding, Reports of Special Committees on Immediate Action on Higher Education, Federal Pensions and Uniform Type were presented, and the resulting discussion occupied the entire forenoon, the friends of American Braille predominating.

The afternoon session, Rev. Charles H. Jones presiding, had for its programme the Report of the Committee on Resolutions, the Election of Officers and other business. At the evening session there was a brief account of work by delegates not previously heard from, with music by Miss La-Barraque and Mr. Frank O'Brien.

I was not present at the closing session, but can testify to the general success of the Convention, the deep interest taken in the several discussions and the universal satisfaction that such an opportunity had been afforded to compare notes and learn from one another.

Address to Women's Clubs.

The following extracts are taken from an address delivered by Superintendent Clarke, of the Vancouver, Washington, State School for the Deaf and Blind, before the State Federation of Women's Clubs at Port Townsend:—

The hearty support I have received from the Board, the progress we have made in gaining the good will of the children and their parents give us the utmost confidence in the future. Such good will and support make one feel strong enough for any amount of work.

The blind children of Washington will be much better provided for next year than ever before, but we will never be up with the procession as long as we have these two schools combined. The blind should have a school of their own, entirely separate from any other class. Have it located convenient to some centre of population where the pupils may have easy access to musical entertainments, lectures, etc., and may come in contact with people often enough to overcome the excessive sensitiveness from which so many suffer so keenly. Give them a good strong specialist for the head of the school, one who knows too much about his specialty to think he knows it all. You know that we specialists are all cranks. That is another reason for separating the schools. Two cranks running on different eccentrics in the same building are apt to collide and when they do something breaks.

What is the object of our school? Is it to take care of the blind and deaf children of the State? By no means. It is to fit them to take care of themselves. To make self-respecting, self-supporting citizens of the children sent to us. The money spent by the State is not given in charity at all, but is invested with the sure hope of bountiful return. The State expects and gets its returns from the children who are taken from the ranks of dependents and lost sight of among the army of producers. The purpose of every school for the deaf and blind is to equip the children for the life they are

to lead. To do this we must aim definitely to make the graduates self-supporting. More should not be expected from these classes than is expected of the seeing and hearing. Most of our children come from that class from which is recruited that vast army of workers for their daily bread. It is unreasonable to try to make professionals out of those, who, if they had all their five senses, would be laborers or artizans. I confess that my schoolmaster's pride is much puffed up when I get creditable reports from one of my graduates who takes his degree in a college although his normal brothers are day laborers; but when the inevitable application for a place as teacher comes from him, and I have no place to give and know that other superintendents are in the same fix, there is no pride in my feelings when I think that perhaps after all I have not given John a square deal in devoting so much of his precious time and energy to acquiring something for which he can get no bread. I am aware that the "bread and butter argument" is a very unpopular one, but, my friends, it is the most convincing one in the world.

Now as to your proposed work in the interests of the adult blind. Let me congratulate our State on the fact that her women are in the foremost rank in taking up this work. When I first heard of your turning your attention to this work it was with fear and trembling. Permit me to say those fears have been set at rest by my correspondence with your committee. Women who realize as keenly as they evidently did that it is necessary to know what has been done by others before deciding what one wishes to do. are much more nearly akin to the angels than that other class who rush in.

The Public.

Dr. Edward E. Allen, one of the foremost educators of the blind in the United States, formerly of the Royal Normal College for the Blind, London, England, and of the Pennsylvania Institution for the Blind at Overbrook, but now of the Perkins Institution and Massachusetts School for the Blind, Boston, says that "effective work for the blind is a double work—the educating of the sightless themselves and, no less important, the educating of the public about them. This second work can be done by answering fully all inquiries, by making the school a bureau of information, and by giving numerous special exhibitions, besides throwing the school open to visitors at all times."

Ontario is behind many of the adjacent States, and very far behind most European countries, in the matter of public interest in the condition and the welfare of the blind. This is not because our people are hard-hearted, but because their attention has not been called to the needs and the claims of their fellow citizens who are sightless. When I mingled with the earnest, intelligent men and women at the Boston Convention, who are giving their time and their money to help the blind; when I saw what has been done for the adult blind at Milwaukee and at Saginaw, and when I heard or read of the grand movements in other localities, I determined that it would not be my fault if the Ontario conscience remained unawakened. I hope to see a Commission appointed, like those of New York and Massachusetts, to deal with the case of the blind of Ontario—not the children only, but the adults as well, for blind adults far outnumber blind children. In the meantime, pending such action as the Legislature in its wisdom may take, I will, with the Minister's permission, narrate something of what is being done for the blind elsewhere, and as this report will be read to some hundreds of blind people, and will be read by other hundreds of people who

have blind friends or relatives, I will incorporate in the report such items of special interest to the blind as I have been able to collect since the compilation of the last report. Among these are accounts of wonderful achievements of blind men, which cannot but be encouraging to others as yet unaware of their own powers and possibilities.

I have to thank my old friends of the Ontario newspaper press for their cordial assistance in bringing the existence and advantages of the school to the notice of the parents of blind children, for fair and ample reviews of the last annual report, and for many flattering and sympathetic references to myself. I noticed one editorial which seemed to require a reply and to invite explanation, therefore with the permission of the Department I wrote the following letter, which was duly inserted in the *Toronto News* and copied or commented upon by several other papers:—

The Problem of the Blind.

To the Editor of the News:

Sir,—In the *News* of March 11th, under the heading, "The Problem of the Blind," you say that, if it be true that "several bright, intelligent girls, graduates of the Brantford Institution (for the blind), are in county houses of refuge, the Province is not getting full value for the $35,000 which is being spent annually at Brantford," and in the context you remark that "all educators of the blind must be more than routine men. They must be prepared to experiment constantly in the hope that they may discover some new way in which the unseeing can be made self-supporting." In the same article you ask: "Does the Ontario Institution keep abreast of the experiments in other centres of education for the blind? Is every available method of wage-earning tested?"

Although you admit in the opening sentences of the editorial from which I have quoted that the problem of making the blind self-supporting after they leave their school "has not been solved yet, despite the fact that many educators of eminence have labored upon it for years," you appear to have decided that the presence of ex-pupils of the Brantford Institution in the poor-house is *prima facie* evidence of some defect in the methods or management of the Institution. To those who have not made a careful study of "The Problem of the Blind," such an inference is natural; and for the information of yourself and your readers I beg leave to present a few facts with which the people of Ontario must become familiar before "The Problem of the Blind" can be satisfactorily solved.

It is a common delusion that blind persons, if properly educated and trained, can earn as much, or nearly as much, as sighted persons of equal natural ability. The fact is that blind persons, in nearly all of the few occupations in which they can work at all, can only produce from one-fifth to one-third as much as is produced by their sighted competitors. Turn to the evidence taken by the British Royal Commission, at the International Conference of Blind Educators at Edinburgh, at the Saginaw Convention or by the New York State Commission, and it will be seen that only a small proportion of the blind in Europe and America are wholly self-supporting. The difference between the cost of their subsistence and the value of their product has to be made up by pensions, by supplemented wages or by charitable contributions in some form. This state of affairs, perfectly understood in Europe, where the Saxon system of after-care (Fuersorge) has been in operation for more than fifty years, has not been forced upon the attention of the Ontario public, because most of the pupils of the Ontario Institution

came from homes to which they could return after completing their school course. Their food and lodging being provided by parents or other relatives, they have made themselves useful and have earned some money by basket-making, cane-seating, hammock-making, piano-tuning, sewing, knitting, crocheting, bead-work, etc., while helping to entertain their friends and neighbors by their literary and musical attainments. Some have earned more than their own living; most of them less. But can it be fairly said of the latter class that they have "failed to take a self-respecting place in the world?"

Out of more than eight hundred pupils who have been enrolled in the Brantford Institution, I can trace less than a dozen as inmates of poor-houses—less than two per cent. Three of these have gone to the county houses of refuge within the last two years, two direct from the Institution, and the third after making a brave but futile effort to earn enough by teaching music to support herself. All three have a fair literary education, one is an expert pianist, another a good singer and reciter, two of the three can sew and knit by hand or machine. None of the three can earn enough to provide both food and clothing; they have no relatives or friends to help them; no benevolent person volunteered to pay their board at a private house; they had all long outstayed the usual term at the Brantford school—what was there left to do but send them to the houses of refuge in the counties from which they came?

The ordinary young woman, fairly educated, with many gainful occupations to choose from, does not earn much more than a decent living. Deny her access to employment as a nurse, a saleswoman, a stenographer, a dressmaker or milliner, a waitress, a teacher, a housemaid, a telephone girl and the other occupations to success in which sight is essential, and what would her earnings be? With the range of employment thus restricted, deprive her of sight, money, friends, and then wonder, if you can, that there are some educated blind women in the county poor-houses. I am surprised and thankful that there are not more of them.

In Connecticut, Indiana, Michigan and Wisconsin, workshops for the adult blind have been established, in which trades are taught, industry is encouraged, help is given as required and steady employment is guaranteed. These shops are not expected to be self-sustaining. The truth with regard to the blind—that the graduate of a school, without home or friends or money, may not be immediately able to earn anything, or eventually able to earn a full living—is acknowledged and the remedy provided.

In New York city and Washington State committees of influential ladies are studying the problem and working to provide remunerative employment for the blind. There will be some disappointments, but the results as a whole will be beneficial. Ontario will fall into line when its people know what needs to be done.

Not all the ex-pupils of the Brantford school need pensions or supplementary wages. Looking over the list of those productively employed, I find more than a score of tuners working in piano factories, others carrying on a custom tuning business in country places, many teaching music, a few church organists, several selling pianos, organs, sewing machines, churns, agricultural implements, tea, small wares and other commodities; one studying theology, being already an Arts graduate, one an undergraduate in college, and two preparing for matriculation, two studying osteopathy in the United States, one a recent graduate in massage, a confectioner, a janitor, an evangelist, several basket-makers and general repairers.

Offset these against the failures, whether the failures are the fault of the school, of the pupils themselves, or traceable to circumstances beyond the control of either, and the average record is not one of which to be ashamed. I would like to review what you say about the literary teaching and the examinations in the Brantford school, but time and space for the present forbid.

H. F. Gardiner, *Principal O. I. B.*

That the subject has an international interest will be seen from the following:—

Kentucky Institution for the Education of the Blind.

Louisville, Ky., April 18, 1907.

H. F. Gardiner, *Principal of the Ontario Institution for the Blind*:

My Dear Sir,—I thank you for your very sound and sensible article in *The Expositor* of April 8th. You have expressed the facts truthfully and concisely, and I heartily endorse what you have said. I know of no other schools that are expected to guarantee a livelihood to every one of their graduates. Your school has always ranked among the first in the country and its record is as good as any. To expect that defectives can do as well as normal persons is a reflection on the Almighty, as intimating that He would endow any with superfluous senses.

Yous fraternally,

B. B. Huntoon.

(*From the Romney, West Virginia, Tablet, May 4th, 1907.*)

The last Report of the Ontario Institution for the Blind is on my table. I am gratified to find that all the fine promise of the Institution is being worthily kept. Mr. H. F. Gardiner, A.M., the accomplished superintendent, who made his appearance for the first time in the Association at St. Louis in 1904, is applying an amount of energy to the solution of the various questions that affect the interests of the blind, before which many of them will surely have to yield sooner or later. This report is of special value not only on account of what he records of the proceedings of his own staff, but because of the gathering together of information that I suspect there are superintendents who might have long to search for it. The record includes inquiries into the condition and prospects of the blind in different countries and under different systems, synopses of proceedings of special meetings in the like interest, and conferences of various sorts.

Superintendent Gardiner, however, is finding out that, do what he may, he will still find critics. A poor girl from his Institution came through some unfortunate providence to the care of the poor-house, and the cry was promptly taken up that the school was failing in its duty, and that the thousands spent for the education and training of the blind was sadly misappropriated. I question if any establishment of the kind on the continent is doing more for its blind than that at Brantford. The wisdom displayed in the administration, and in devising means for the accomplishment of most desired results, the evident concern for the future of the pupils, and the like, make it manifest that he may neglect such critics, if anyone may. In the States, we would think ourselves happy to escape with an occasional inmate at the alms-house.

The interest in athletics is enjoying a share of the attention that seems astonishing when one considers the difficulties; but the results justify all the attention that is given it. A meet of blind athletes is in contemplation for no distant day and it will go handsomely with such men behind it.

The O. I. B. is finishing its music pupils at a Toronto School of Music among seeing people, and the most favorable comment is made by the papers.

The instruction in Domestic Science for the girls at Brantford is one of the most conspicuous matters of practical value in the whole report. They are giving good and wise instruction, and are overcoming the reluctance on the part of the parents to give their girls a chance at this most hopeful field of usefulness. God speed it.

Editor Brantford Expositor:

Sir,—Through the courtesy of Principal Gardiner the late catalogue of the Ontario School for the Blind reached me not long ago, and I was amazed at the wealth of information it contained along the lines on which I have spent so many fruitless hours of research. Nothing so invaluable has hitherto reached me. I regret that my own simple and incomplete recommendation, which I now enclose to you, was not sent Mr. Gardiner in time for insertion in the catalogue. It might have awakened interest somewhere, even if it does not furnish information of much value. The following was adopted by the Washington State Federation of Women's Clubs last June:—

Suggestions for Promoting the Interests of the Blind.

The Committee for Promoting the Interests of the Blind, appointed at the meeting of the Washington State Federation of Women's Clubs, held in Walla Walla, in June, 1905, considers the following lines of effort practicable and recommends their adoption:—

Preventive.—To endorse the passage of a bill entitled "A Law for the Prevention of Infantile Blindness," and give this law wide publicity.

To use all possible means to prevent blindness.

To devise some plan for preventing blindness among our Indians.

Economic.—To establish in the large centres registration and employment bureaus for the blind.

To establish home teaching for reading and the simpler trades, such as hammock-making, chair-caning, etc.

To secure material at cost for blind workers, and provide a market for their products.

To start competent blind persons in business, secure patronage for them, and provide guides for crippled blind canvassers.

Courtesies.—To assist in obtaining reading matter, and to make known the law providing for its free transportation.

To provide guides for church attendance, tickets and guides to good musical and other entertainments, and readers of current topics.

Education.—To see that education is begun at as early an age as possible.

To urge an increased appropriation for the Washington School for the Deaf and Blind, so that the corps of teachers may be increased, the courses in music and manual training may be made more complete, and that the teaching of domestic science may be inaugurated.

To urge that the school for the blind, when separated from that of the deaf, be established where good musical opportunities are accessible.

To bring the School for the Blind to the attention of the public, encourage gifts and legacies to the school, and secure for its graduates better financial opportunities.

To make a register of the blind, file copies with the proper state officials, and keep the same corrected to date.

Mrs. John B. Blalock, The Metropole, Spokane.
Mrs. Kate T. Holmes, 310 Thirtieth Avenue, Seattle.
Mrs. James Barnes, North Yakima.

Committee for promoting the Interests of the Blind.

I have read with much interest Mr. Gardiner's article in April 8 issue of your paper, "The Problem of the Blind." Surely no school can ever be beyond the need of constantly searching for new and better vocations for blind people, but the problem of keeping the blind from becoming public charges cannot be solved by the schools alone. It is well for the press to be an incentive to the schools, and to keep their aims before the public. Will you not also ask your people to take up the work of looking after the adult blind, and especially those who lose their sight when too old to enter the existing schools? It is more practicable for private philanthropy than for the State to handle that form of charity which expends itself in helpfulness rather than in alms-giving, and which encourages and elevates the recipient rather than pauperizes him. We have indeed found many discouragements, as Mr. Gardiner supposes in his mention of our work, but there have also been successful issues, and one difficulty overcome makes the next less formidable.

Mrs. John B. Blalock, Chairman,

Committee for Blind, Washington State Federation Women's Clubs, Spokane, Wash.

An Emperor's Interest in the Blind.

Among the reports received from Europe, in exchange for the Thirty-fifth Annual Report of the Ontario Institution, were two from Prague, Bohemia, the first, containing 128 pages, giving the usual information about the work of the Klar'sche Blindenanstalt during the year, and the second, of 33 pages, containing a full account of the proceedings in connection with the visit of His Majesty Emperor Francis Joseph I., on the 23rd of April, 1907, for the purpose of laying the corner stone of a new building in course of erection for the use of the Institution. Beginning as a private institution for poor blind children and those having diseased eyes, one hundred years ago, it came under the superintendence of Dr. Alois Klar twenty-five years later, whose name it has since borne. In 1833, the year of Dr. Klar's death, the Institution was visited by Emperor Francis I. and Empress Carola Augusta. Dr. Klar was succeeded by his son, Paul Alois Klar, who carried on the work successfully until his death in 1860, when his son, Rudolf Maria Klar, took up the task of his grandfather and father, devoting his time and energy to the welfare of the blind until 1898, when he died. He was the founder of the blind Kindergarten, which now has 26 pupils, the main school having 102.

Great preparations had been made to fittingly receive the Emperor of Austria. The buildings and grounds were beautifully decorated, there was a grand assemblage of the nobility and clergy, and the blind pupils cheered heartily when they heard the Emperor's voice. A boy from the Kinder-

garten presented a bouquet and recited a verse in the Czech language, and a little girl made a similar presentation accompanied by two verses in German. To the boy the Emperor presented a gold watch with the Imperial initials and to the girl a gold brooch with his name inscribed thereon. Then followed addresses and replies, and the laying of the corner stone and the signing of the Emperor's name in the Visitors' Book, where his own name had been written sixty years before, along with those of Emperor Max of Mexico and Grand Duke Karl Ludwig. The Emperor's previous visits to the Institution occurred in 1847 and in 1858. In his reply to the address presented by His Highness Prince Max Egon, Prince of Fuerstenburg, the Emperor said that he received the cordial greeting and loyal homage with satisfaction. He had gladly welcomed the invitation to lay the corner stone of the extension building of the Klar Institution for the Blind, in order to give a new sign of his recognition of the blessed work of the Institution during the past hundred years. The management of the Institution, in bringing under its care the incurable blind of the land, had earned the thanks of the whole population. In laying the corner stone of the new building, he gave expression to the wish and the expectation that the old spirit of true humanity and pure neighborliness might flourish in the new house.

The whole report, which is handsomely illustrated, is most interesting, and one can but wonder how long it will be before Canadians will care as much for the welfare of the blind as the Bohemians and other Europeans seem to do.

Our King and Queen.

The annual report of the Royal Normal College and Academy of Music for the Blind, Upper Norwod, S. E., conveys the information that Their Majesties the King and Queen, the Prince and Princess of Wales, Princess Victoria and the Landgraf of Hesse were present at a concert and gymnastic display given by the students of the College in the Albert Hall on Monday, the 3rd June, 1907. On Tuesday morning the 4th June, the Principal received the following letter from Lord Knollys:—

Buckingham Palace, 3rd June, 1907.

Dear Dr. Campbell,

I am desired by the King and Queen to inform you that they were much pleased with the concert and gymnastics given by your school this afternoon.

Their Majesties thought the former was excellent and the performances extremely good, while they considered the latter as being simply wonderful. It was easy for them to perceive that the training, whether it regarded the music or the gymnastics, has evidently attained a high standard.

I must add that the King and Queen were also much gratified by all of the arrangements, which could not indeed have been better I hear.

Yours very truly,

(Signed) Knollys.

A Blind Colony or City.

(The Queen of Roumania in the New York Outlook, Dec., 1906.)

My conviction has been for many years that it is a mistake to make the blind work so much with their hands, when brain work would be very much better, and their capacity for brain work shows where their real future lies.

They ought to be the greatest students on earth, those two millions of blind people. They ought to be philosophers, theologians, mathematicians, linguists, teachers of languages and music—teachers of everything that does not require the telescope or the microscope, and therefore doctors to a certain degree, masseurs with very deep medical knowledge. And toward this grand aim I have been moving for many years with all my heart and soul; and now I hope to come before the world of the blind with something that will let them rise rapidly to what I think they ought to be. In my house a machine had been invented that enables every blind person, young or old, weak or strong, to print five thousand sheets a day in raised characters for the blind without the slightest effort.

A blind printer, Theodoresco, had the first idea of it, and then a genius who entered my service as a servant, but whom I made a kind of secretary from the first, as he was a stenographer and learned merchant, took the idea in hand, worked at it day and night for a year and a half, and now the machine is so simple that any child can in a few minutes work it.

With this machine, Monske, the inventor— who, by-the-by, will not take a penny for himself, but offers his invention to our blind, of whom Roumania has twenty thousand—and I have built after long and careful work our plan for the blind colony or city that we have begun already. Most of the blind are adults, and I saw from the first the utter impossibility of doing what other countries had done; we are too poor for that. We cannot build enormous schools that cost half a million for seventy blind children, etc. It would be utterly useless. We must begin by finding bread for the fathers of families who have gone blind and are reduced to begging in the streets and in the cemeteries. We have already twenty-two fathers who earn their bread by making chairs and ropes, and lead seals for the sacks of corn, and things that go over the sea, and nets by hundreds of thousands. We mean to build them small houses around big gardens, with church and school in the middle. We mean to let the seeing and the blind in those families work together, have one large kitchen in common and one table, which is already installed in the garden, and where Monske and his family dine with the blind. As soon as there is one kitchen and one table the women and children can work the knitting machines, the ropes, the nets and all the rest—ever so many things, we shall find—and then choose the most gifted among them for higher work. I have one who is going to print Kant and Spinoza as soon as the first machines are ready. The blind will have as many books and as large libraries as the seeing, for the printing of them creates no overwork, but is, on the contrary, a new way for the blind to earn their living. The difficulty has been till now that too few books were printed. Now every blind man or woman, and even child, will be able to make editions for themselves, and sell them. They can print as many editions at a time as they choose or hope to sell, every blind person for himself, or a few united, setting six or seven pages, and having one press in common. From Germany we have already orders for thirty-six machines before they were ready, so much the need for them is felt everywhere. The simplicity of it strikes everyone. I have one house and garden now, but I hope soon to build one little house after the other, with a verandah around it, as Roumanian houses mostly have. The school, the music hall and the church must be in the middle—one church, that of the country—but we shall have religious instruction in every religion, as the blind are already of four or five different churches. As Braille goes all over the world, every language can be printed on this machine. It was a matter of a few days for the blind master to arrange a Roumanian alphabet.

Much light shall stream from the blind people's fingers from this day onward. They shall have as many libraries as they want, private and public, and these books will spread over the world and bring life and enjoyment to them all. Music will be printed in such quantities that there will soon be no production that the blind cannot read and play, in orchestras, on the organs, and sing with many voices. We shall hear all Handel sung and played by blind people, and, what is most extraordinary, we shall be able to make them books with illustrations, as the press is so powerful that it prints a dollar, with the effigy quite clear.

It is not to be foreseen what the blind may grasp by these means of instruction which bring them into contact with every thought that has been expressed in writing in every language of the world. And, as the inventors do not take a penny for themselves, my city will rise rapidly. They sing at their work already, and when they first entered the new home they stood there disconsolate and were so afraid. But the seeing children already are accustomed to rush to them, to seize their hands, and to conduct them joyfully to their home, with bright welcome. Their wives are no more in despair, but smile and hope and know that they can educate their children. We shall have blind washerwomen among the seeing: with the knitting machines we shall not only make the socks and woollen underclothes for the whole establishment, but a great deal for selling, so that this will be another source of income for the Vatra Luminoasa. We hope to weave also and to make carpets, not only brushes and chairs. I am sure we shall discover many new ways of helping, but to me the principal thing is no more to separate them, but to keep them together in a happy socialistic community of my invention.

We shall begin a newspaper directly, and I have sent for a blind English lady who writes three languages perfectly, and who is going to be our correspondent on the Hammond machine, and she will teach English and German, and write stories, and be happy, too, I hope. I believe that all the inmates of the Vatra Luminoasa will be as happy as their sad condition will allow, and help each other, and laugh and sing, and live as if they were happier than the seeing that are not so well taken care of. A lady has made me a present of 20,000 square metres of her country place, so that we can have gardens there, taken care of by the blind, that will bring forth all our fruit and vegetables. The gifts are flowing into our box during the exhibition. There have even been tenpence and half-francs from poor workpeople. Everybody feels that this is going to be a grand thing and a blessed one, and that I am going to give back to the country ever so many useful citizens who were beggars before.

The whole world will change for the blind as soon as they can have as many books as the seeing, and are no longer dependent on the good or bad taste of the charitable souls who copy.

Opposition to Segregation.

(Brooklyn, New York, Eagle, November 25th, 1906.)

The press of the country has recently had a good deal to say about the work Queen Carmen Sylva of Roumania is doing for the blind. She is trying the experiment of establishing a colony or town for blind people where no one but blind and the families of blind reside. Mrs. Francis Fearn, of this country, has spent many years of her life abroad, during the career of her late husband, who was in the diplomatic service. She has recently

seen a good deal of Queen Carmen Sylva, and her work for the blind, and has become so much interested in it that she has announced that she will shortly return to America and attempt to inaugurate some of the Queen's charities for the blind in this country. Friends of the blind everywhere will welcome anything that will aid this afflicted class, but there is not likely a single individual in this country who knows anything about the blind who would advocate the idea of segregating the blind in any one town or community. They all say that this idea has not a single good feature, and has many objectionable ones.

Friday afternoon a number of prominent blind people and friends of the blind met in Manhattan, at the home of Miss Winifred Holt, on Seventy-eighth street, who is secretary of the New York Association for the Blind, which has done and is doing such a great work for the blind in the way of starting a workshop here for them, seeking employment in various lines for the blind, and providing them with hundreds of free theatre tickets. This idea of the blind colony was discussed yesterday. There were present besides the Misses Holt and Mrs. Hewitt, who is a very active worker in the interests of the association, Dr. Clark, a blind man who was for many years a professor in Columbia College, and who is a personal friend of Seth Low; O. H. Burritt, superintendent of the State School for the Blind at Batavia, N.Y.; Dr. E. E. Allen, superintendent of the School for the Blind at Philadelphia; Dr. F. Park Lewis, of Buffalo, who has done much active work for the blind and is much interested now in the work of preventing infantile blindness; Walter G. Holmes, of the Ziegler Magazine for the Blind; Eben P. Morford, a blind man, who is superintendent of the very successful Industrial Home for the Blind in Brooklyn, and last, but by no means least, General Edward F. Jones, of Binghampton, N.Y., ex-Lieutenant-Governor of the State, who has been blind for several years. All the world knows General Jones as "Jones who pays the freight."

The objection to segregating the blind was freely discussed, and among the many reasons offered for opposing such a plan was that the blind should associate as much as possible with seeing people and learn the ways of those who see; that they were much happier when associated with seeing people, and thereby kept in touch with the world; and that it was much easier for them to earn a livelihood when assisted by, and in sympathy of, seeing people, but the greatest objection of all was that, if thrown together, there was a great danger of intermarriage among blind people. This is greatly to be deplored for many reasons. While, if a blind man or woman can afford it, it is always well for him or her to marry, but never for a blind person to marry another who is sightless, because it throws two very helpless people together, but most of all for the great danger that children of such a marriage might themselves be blind, though this is not by any means always the case.

General Jones was most positive in his statements along this line, and he said: "I do wish the press of this country would take the matter up and very bitterly oppose any such idea. I commend Queen Carmen Sylva for the great work she is doing in other lines, and will commend Mrs. Fearn for anything she may do for the blind in this country, but I shall bitterly oppose this idea of segregating the blind in colonies as having no good features and very many disastrous ones. In this I will be sustained by everyone most interested in and familiar with work for the blind. The superintendent of every school for the blind in the States will endorse my views on the subject.

"I know of a case now in an industrial home for the blind, in an adjoining State of ours, which is doing a great work in the way of teaching trades to blind men and women, but the superintendent said a few days ago that he had now one of the most distressing cases to deal with, and that was that two of his blind had fallen in love with each other, and it was his painful duty in some way to prevent a marriage. An experiment was made in an Iowa town some years ago in a small way of establishing a colony for the blind, and it soon resulted in a rapidly growing colony of blind children. Real estate went down to almost nothing in the town, and the undertaking was abandoned."

The Blind of New York State.

(Buffalo Evening News, April 10th, 1907.)

As a result of an exhaustive census, the New York State Commission on the Blind, of which Dr. F. Park Lewis is chairman, this week recommended in a report to the Legislature the creation of a State Board for the Blind, not dissimilar in scope to the permanent Massachusetts Commission, and the carrying out of a State policy that would eliminate the preventable causes of blindness, reduce the burden of chronic care for the victims of these preventable causes, and by a state register, employment bureau and industrial training, aim to meet the needs of the adult blind now so largely neglected, and re-establish them in the economic community.

This Commission continued the work begun by the State Commission of 1903, and has on file records of 5,800 blind persons in New York State (of whom 2,250 are in the greater city)—300 more than were returned by the Federal census. The statistical tables are based on 5,310 cases on file on Feb. 15, of whom 55.4 per cent. are males, 44.6 females; 64.9 per cent. totally blind, 35.1 partially blind. The Commission finds that one in every 1,295 people in the State is blind, and estimates the total number in the United States to be nearly 100,000.

Approximately 600, or 10 per cent. of the blind in the State, are between 5 and 21 years of age, but of these 50 per cent. are not actually enrolled in the schools; half of them at least, or 150 children, are still eligible. In other words, only about two-thirds of the number who are eligible are in the schools. Even more striking is the obverse of this showing—that 90.6 per cent. of the 5,310 cases on file are 20 years of age and upwards, and that the only State provision made for the adult blind is their care in the almshouses as part of the indigent population, while the number so cared for is 361.

Libraries for the Blind.—The report calls attention to the excellent facilities afforded by libraries for the blind in connection with the public libraries of the State, and notes the recent rapid advances in providing literature for blind readers. The pension system in vogue in the city of Greater New York is described briefly. Under the head of private charities maintained in the State are described the Home for Blind Babies, the Church Home for the Blind and the Industrial Home for the Blind, all in the Borough of Brooklyn; the St. Joseph's Blind Asylum at Mt. Loretto, Staten Island, the Society for the relief of the Destitute Blind at Amsterdam Avenue, and the work done for the past year and a half by the New York Association for the Blind.

This part of the report concludes with the statement that "the State of New York is spending for the education of its blind children about $100,000

annually, but with the exception of $1,000 expended for embossing new books and the amounts expended by the several counties in caring for the indigent blind in the various alms-houses of the State (a total of 361), not one dollar of public money is spent for the improvement of the condition of the adult blind." The report then considers the blind of the United States, their number, which the Commission believes to be nearly 100,000, the provisions, public and private, made for their education and care, which includes schools for blind minors, homes for blind babies and schools for the instruction of young children; for blind adults pensions, homes, workshops, industrial homes, home teaching, and circulating libraries. Each of these provisions is described, somewhat in detail, special emphasis being laid upon the various kinds of institutions provided throughout the United States for the adult blind.

It is shown that California, Illinois, Michigan and Wisconsin maintain entirely at State expense institutions for the blind adult; that Connecticut and Pennsylvania have institutions which are primarily private corporations, but which are now to some extent aided by public funds, and that dotting the face of the country are little homes for blind women, the outgrowth of private charity.

Prevention of Blindness.—In considering at length the matter of the prevention of blindness, the Commission quotes authorities to show that ophthalmia neonatorum is the cause of more blindness than any other local disease, except perhaps atrophy of the optic nerve; that in 99 cases out of 100 this disease is preventable by the use of very simple precautions; that the probable annual cost to the people of the State of New York for the support of its victims is over $110,000; that among 1,000 blind there are only 225 unavoidable cases, 449 that are possibly avoidable and 326 that are absolutely avoidable, or in other words, that one-third of the cases of blindness are absolutely preventable. The causes of blindness are considered under two heads, those resulting from disease and those from accident. Attention is called to the fact that the foundation of eye disease is frequently laid in the schools, and remedies to prevent blindness from this cause are suggested.

The draft of a proposed law closes the report. This law provides for a State Board for the Blind, consisting of five persons appointed by the Governor for a term of five years, the members of the Board to serve without compensation. The Board shall prepare and maintain a complete register of the blind, act as a bureau of information and industrial aid, continue to make inquiries concerning the causes of blindness and the prevention of the same. The Board may provide home teaching, and, with the consent of the Governor, may establish schools for industrial training and workshops for the employment of suitable blind persons, and may appoint such officers and agents as may be necessary. Forty thousand dollars is asked for carrying out the provisions of the bill.

Self-Support.

(Detroit News-Tribune, 21st July, 1907.)

Emanating from Boston is a movement which has in mind the establishment of a State "industrial institution" or factory in every State in the Union, and in which every blind person of that State will find steady and remunerative employment. It is doubtful if a more important step than this has ever been taken in behalf of any class of people. Massachusetts, as a

State, has already taken up the work of furnishing employment for the blind. Charles Campbell, who has had charge of the work from the first, and who has the most thorough knowledge of the ability of the blind, gives the following opinion: "I fully believe that at the end of twenty years every able-bodied blind person between the ages of sixteen and thirty needing industrial opportunities can find work of some kind side by side with seeing people, if efforts are persistently made in this direction. Of course it will take time to discover the places where such employees are welcome, but in my visits to the various factories I have seen enough automatic processes to convince me that it is merely a question of time before blind operatives become an accepted part of the great army of factory workers."

Each year more and more blind people all over the country are becoming self-supporting. They are even entering the professions. Philadelphia has two blind doctors, and there is one in Spokane; Chicago has a blind accountant, who works out problems in his brain and has an assistant to do most of the setting down of figures, and there are scores of other blind people now earning their livelihoods in unusual ways. One of the most remarkable achievements of a blind person has been that of Gilbert McDonald, who, blind since birth, is one of the four telegraphers in the world who practice at the key with no eyes to guide their hands. He lives and works at Maunie, Ill., on the Louisville & Nashville railroad. For ten years the sole bread winner for his widowed mother and three younger sisters, this telegraph operator refuses to leave his post of duty and again take up a course of study at the Illinois State School for the Blind at Jacksonville. At the age of twelve he was given the job of hustling baggage and doing general work around the depot. He also scrubbed the floors and kept the fires going. Always fascinated by the busy clickety-click of the telegraph wires, he asked Mr. Foster, the agent, if there was any way he could learn the language of Morse, and Foster set about to teach the lad. In less than a month he knew the Morse code from start to finish and could send short messages. Blindness had developed the senses of touch and hearing to a remarkable degree. Months of hard labor enabled him to take down words that went over the wires during the day, and then, as he was untutored and ignorant in scholastic attainments, he would take the messages home at night, where his sisters taught him their meaning. This striving youth during an election attempted to take down the reports, as well as he could catch them, while they were going over the wires to Springfield. He used the typewriter, and for five hours worked steadily. Although he did not know the meaning of the greater part of it, he turned out perfect copy for the anxious crowd at Maunie. This one event, he says, was the time of his life.

His work attracted the attention of railroad officials, and the blind wire wizard was made assistant operator at Maunie at a salary of $15.00 per month to begin with, an amount which McDonald was only too glad to receive. The various despatchers who worked in the cities around Maunie often cautioned the operator about leaving "Gib," as they often called him, alone. They urged that his work be confined mostly to the minor details of the office. However, his proficiency as a master of the dots and dashes soon won the high regard of Agent Foster, and he often left the boy in charge of the office. The money safe was often left unlocked and entrusted to the youth's care. One day while alone in the office, J. W. Logsdon, Superintendent of the St. Louis division of the railroad, dropped in, hoping to find Foster, with whom he wished to transact some immediate business. Logs-

don was angered at the agent's disregard of orders and was preparing to administer a severe reprimand to the blind boy. As the lad sold tickets, weighed baggage, and attended to the various other duties of the office and waiting rooms, the grizzled railroad veteran looked on in awe. When he was ready to leave a kind hand was laid upon the blind boy's shoulder. The spirit of rebuke had vanished and the gruff Superintendent became his friend. Logsdon was very much taken up with the boy. When he reached home he wrote to McDonald in regard to sending him to the Illinois State School for the Blind at Jacksonville. While thinking the matter over, young McDonald received an order to start at once for Jacksonville. Logsdon was instrumental in this and, protesting, the youth went away to school. While there he gained the distinction of being one of the brightest students in the school. After he had been at school for some time he wrote home asking if he could have his old position. Being assured that he could and at an increased salary, he returned to the little office at Maunie to learn more about telegraphy. Last year McDonald was made manager of the telegraph office at Maunie and it is said that he has done excellent work.

Help for the Blind.

(March, 1907, Scrap Book.)

A blind clergyman used to lecture in some of our Western cities on "The Fun of Being Blind." So armored in good humor was he that his optimism seemed never to falter, and through his steadfast regard of pleasant things he got much happiness out of life.

Truly, in some respects the blind hold a seeming advantage over those who see; for to them the existence of sin and wretchedness and misery need never be known. They need never recognize the contrast between the palace and the hovel; there need be no thorns in their roses. Is not the beauty of character in so many of the blind explained by their protected innocence? This happy innocence, of course, cannot equal the larger happiness of seeing misery and alleviating it. But how many of those who can see attain that larger happiness? How many, for instance, do anything to enlarge the sphere of activity for the blind?

Helen Keller, herself blind, deaf, and—until mechanically trained to speak—dumb, is indefatigable in her efforts to help others who are cut off from the light of day. Her wonderful story is well known—how almost miraculously she has triumphed over the dark. She does not even now know what the human voice sounds like—does not know what sound is like, unless by roundabout comparisons in terms of other senses; yet she has learned to speak like other persons, and at a recent meeting of the New York Association for the Blind she talked to a large audience on her favorite subject.

As she stood on the platform she heard none of the applause. Before the time came for her to speak she did not know what the other speakers were saying, except when some of their thoughts were translated to her through the sense of touch. Much of the time she sat with her face buried in a bouquet of flowers, the perfume of which appeared to give her exquisite pleasure. The sense of smell is one of her three avenues to the material enjoyment of life.

How the Blind May be Helped.

(By Helen Keller.)

It is a great pleasure to me to speak in New York about the blind. For New York is great because of the open hand with which it responds to the needs of the weak and the poor. The men and women for whom I speak are poor and weak, in that they lack one of the chief weapons with which the human being fights his battle. But they must not on that account be sent to the rear. Much less must they be pensioned like disabled soldiers. They must be kept in the fight for their own sake, and for the sake of the strong. It is a blessing to the strong to give help to the weak. Otherwise there would be no excuse for having the poor always with us.

The help we give the unfortunate must be intelligent. Charity may flow freely and yet fail to touch the deserts of human life. Disorganized charity is creditable to the heart, but not to the mind. Pity and tears make poetry; but they do not raise model tenement houses, or save the manhood of blind men. The heaviest burden on the blind is not blindness, but idleness, and they can be relieved of this greater burden.

Our work for the blind is practical. The Massachusetts Commission, your Association, and the New York Commission are placing it on a sincere basis. The first task is to make a careful census of the blind, to find out how many there are, how old they are, what are their circumstances, when they lost their sight, and from what cause. Without such a census there can be no order in our work. In Massachusetts this task is nearly completed.

The next step is to awaken each town and city to a sense of its duty to the blind. For it is the community where the blind man lives that ultimately determines his success or his failure. The State can teach him to work, supply him with raw materials and capital to start his business; but his fellow citizens must furnish the market for his products, and give him the encouragement without which no blind man can make headway. They must do more than this; they must meet him with a sympathy that conforms to the dignity of his manhood and his capacity for service. Indeed, the community should regard it as a disgrace for the blind to beg on the street corner, or receive unearned pensions.

It is not helpful—in the long run it is harmful—to buy worthless articles of the blind. For many years kind-hearted people have bought futile and childish things because the blind made them. Quantities of bead-work that can appeal to no eye save the eye of pity have passed as specimens of the work of the blind. If bead-work had been studied in the schools for the blind and supervised by competent seeing persons, it could have been made a profitable industry for the sightless. I have examined beautiful bead-work in the shops—purses, bags, belts, lamp-shades, and dress trimmings—some of it very expensive—imported from France and Germany. Under proper supervision this bead-work could be made by the blind. This is only one example of the sort of manufacture that the blind may profitably engage in.

One of the principal objects of the movement which we ask you to help is to promote good workmanship among the sightless. In Boston, in a fashionable shopping district, the Massachusetts Commission has opened a salesroom where the best handicraft of all the sightless in the State may be exhibited and sold. There are hand-woven curtains, table-covers, bed-spreads, sofa-pillows, linen suits, rugs; and the articles are of good design and workman-

ship. People buy them not out of pity for the maker, but out of admiration for the thing. Orders have already come from Minnesota, from England, from Egypt. So the blind of the New World have sent light into Egyptian darkness.

This shop is under the same roof with the salesroom of the Perkins Institute for the Blind. The old school and the new commission are working side by side. I desire to see similar co-operation between the New York Institution for the Blind and the New York Association. The true value of a school for the sightless is not merely to enlighten intellectual darkness, but to lend a hand to every movement in the interests of the blind. It is not enough that our blind children receive a common school education. They should do something well enough to become wage-earners. When they are properly educated, they desire to work more than they desire ease and entertainment. If some of the blind are ambitionless and lazy, the fault lies partly with those who have directed their education, partly with our indolent progenitors in the Garden of Eden. All over the land the blind are stretching forth eager hands to the new tasks which shall soon be within their reach. They embrace labor gladly because they know it is strength.

One of our critics has suggested that we who call the blind forth to toil are as one who should overload a disabled horse and compel him to earn his oats. In the little village where I live, there was a lady so mistakenly kind to a pet horse that she never broke him to harness, and fed him twelve quarts of oats a day. The horse had to be shot. I am not afraid that we shall kill our blind with kindness. I am still less afraid that we shall break their backs.

Nay, I can tell you of blind men who of their own accord enter the sharp competition of business and put their hands zealously to the tools of trade. It is our part to train them in business, to teach them to use their tools skilfully. Before this Association was thought of, blind men had given examples of energy and industry, and with such examples shining in the dark other blind men will not be content to be numbered among those who will not, or can not, carry burden on shoulder or tool in hand—those who know not the honor of hard-won independence.

The new movement for the blind rests on a foundation of common sense. It is not the baseless fabric of a sentimentalist's dream. We do not believe that the blind should be segregated from the seeing, gathered together in a sort of Zion City, as has been done in Roumania and attempted in Iowa. We have no queen to preside over such a city. America is a democracy, a multimonarchy, and the city of the blind is everywhere. Each community should take care of its own blind, provide employment for them, and enable them to work side by side with the seeing. We do not expect to find among the blind a disproportionate number of geniuses. Education does not develop in them remarkable talent. Like the seeing man, the blind man may be a philosopher, a mathematician, a linguist, a seer, a poet, a prophet. But, believe me, if the light of genius burns within him, it will burn despite his infirmity, and not because of it. The lack of one sense—or two—never helped a human being. We should be glad of the sixth or the sixteenth sense with which our friends and the newspaper reporters, more generous than nature, are wont to endow us. To paraphrase Mr. Kipling, we are not heroes, and we are not cowards too. We are ordinary folk limited by an extraordinary incapacity. If we do not always succeed in our undertakings even with assistance from friends, we console ourselves with the thought that in the vast company of the world's failures is many a sound pair of eyes.

I appeal to you, give the blind man the assistance that shall secure for him complete or partial independence. He is blind and falters. There-

fore go a little more than half-way to meet him. Remember, however brave and self-reliant he is, he will always need a guiding hand in his.—*Putnam's Monthly, April, 1907.*

A "Babel of Prints" for Blind Readers.

The multiplicity of systems of typography for the blind is condemned in *The World's Work* (New York, August) by Helen Keller, who attributes it to the "lack of enthusiasm, intelligence and co-operation on the part of those who have charge of institutions for the blind." The trustees of such institutions, she charges, know almost nothing about the needs and difficulties of blind people, and the confusion caused by the different kinds of blind print is a natural result. Miss Keller writes :

"An obvious illustration of their incompetency and the absence of co-operation between the schools is the confusion in the prints for the blind. One would think that the advantages of having a common print would not require argument. Yet every effort to decide which print is best has failed. The Perkins Institution for the Blind, with a large printing fund, clings to Line Letter—embossed characters, shaped like Roman letters—in spite of the fact that most of the blind prefer a point system. The Pennsylvania Institution for the Blind offers its readers American Braille, a print in which the letters are composed of raised dots. This is a modification of the system which was perfected by Louis Braille three-quarters of a century ago and is still the system used throughout Europe. The New York Institution invented, controls and advocates New York Point, another species of Braille. The money appropriated by the National Government to emboss books for the blind is used for all the types. The new periodical, The Matilda Ziegler Magazine for the Blind, the boon for which we have waited many years, is printed in American Braille and New York Point. The same book, expensive to print once, has to be duplicated in the various systems for the different institutions. Other prints are yet to come. They are still in the crucible of meditation. A plague upon all these prints. Let us have one system, whether it is an ideal one or not. For my part, I wish nothing had been invented except European Braille. There was already a considerable library in this system when the American fever for invention plunged us into this babel of prints, which is typical of the many confusions from which the blind suffer throughout the United States.

"We Americans spend more money on the education of defectives than any other country. But we do not always find the shortest, easiest and most economical way of accomplishing the end we have in view. We desire to bring the greatest happiness to the largest number. We give generously as earnest of our desire, and then we do not see that our bounty is wisely spent."

The following paper from the pen of Mr. William B. Wait, Principal Emeritus New York Institution for the Blind, containing the results of nearly forty years' experience as an educator of the blind, besides the records of experiments covering a much longer period, is deserving of special attention :

The Economic Value of Labor in the Dark. *(Abridged.)*

The problem presented is that of determining the economic efficiency of several thousands of our adult population. They are scattered throughout the state, distributed all along the line of life with numbers increasing in the higher decades, rich and poor, educated and illiterate, exhibiting every

condition of mental and bodily health. We will be greatly assisted in our study if we keep in mind that the question is the economic, commercial practicability of working in darkness and not the question of the desirability of employment for the adult blind.

It is not necessary to amplify upon statements made by painstaking inquirers into the condition of the adult blind, for they sufficiently emphasize the fact that an adult person who loses his sight is by that deprivation at once disabled, rendered infirm, and put out of relation with all the ordinary operations of economic activity.

There can be no doubt but that the work of the hands, in one form or another, is the basis of the economic efficiency of the great mass of the population, and the articles on the adult blind show that the writers with great unanimity regard hand work as being the means of restoring the adult blind to economic efficiency and self-dependence.

So far then it is clear that the symposium articles intend to establish two points: First, that a large majority of the adult blind are not in adjustment with economic conditions, and second, that a restoration of practical relations will be secured by the establishment of trade schools and of factories.

Whatever the number of adult persons in the group may be, it has been assumed that their economic efficiency as hand workers, of which they have been deprived by loss of sight, can be restored to them by a course of training in an industrial or trade school.

Assuming that a trade school is to be established, courses of training will be determined by the trades to be taught. As to the suitability of certain trades, the symposium writers suggest willow work, hand loom, mats and rugs, mattress, net and broom making. Other branches such as knitting, crocheting, sewing by hand and machine, cooking, cane-seating, which unite mental discipline with manual skill, and are specially useful in a course of manual training for the young, cannot be regarded as trades. No consideration need be here given to the courses of training and it is granted that they will be adequate in every particular.

The trade school presupposes and prepares for industrial employment of the adult blind, and having received the full benefits of training at a trade school with the avowed purpose of restoring its graduates to the class of efficient bread winners, they will as a logical sequence expect that they will be given employment either in an individual or in a collective capacity. Unless this result follows, the prime reason for the existence of the trade school fails.

Among the graduates of the trade school will occasionally be one who has energy, tact and address; a faculty for making and executing plans, aptness in buying and selling, in giving credits, in making collections; in short one who possesses that combination of natural and acquired powers that constitute a business man. This most desirable class of trade school graduates will be very small, but as their economic efficiency has an intellectual rather than a manual basis, they form a group apart from those under consideration.

It appears to be the opinion of the Massachusetts and the New York State Commissions that owing to lack of initiative and of capital, and to other causes, the trade school graduates will not be able either to create or to secure stated employment by their own efforts, and hence it will be necessary to provide employment either through private or through public agencies. The commissions, however, are not in entire accord; for while they agree that these trade schools should be maintained by the state and

be under state management, they differ as to the treatment of the employment question. Whether, however, the employment be of private or of public origin, and whether the graduates be employed individually or collectively, in village or city, at one trade or another, the potential fact remains to be determined; namely, the real value of their labor as measured by usual business practice and results.

According to common standards, the returns from the finished products of labor must pay interest on fixed capital, superintendence, shop cost, selling expense, taxes or rent, insurance, repairs, and all other current outlay, and a satisfactory return on the working capital invested. If such returns can be derived from this class of labor as surely as from the labor of men working under usual conditions, then the economic efficiency of these sightless workers will on an average be that of other workers; if not, then their labor value will fall below the commercial standard, and employment will not be offered. The conditions of the situation are easily illustrated:

Suppose B and C to be experts at willow work, a trade always highly esteemed for blind people, because light is less essential in this than in other trades and also because little has been done in this line with labor-saving machinery. Suppose that they be required to work in competition with each other, all the conditions being the same except that C shall be blindfolded. Although C is not blind, he is for the time working as blind people must work, that is without the aid of sight, the pilot sense that guides and directs every movement of the workman's hands. The result can be foretold without calculation, for it can be guessed. The work of C for a given time, when compared with that of B, will be found to be less in quantity, poorer in variety, not uniformly equal in quality or finish, and therefore less in market value. Willow work is the type of all handicrafts. C is the type of those who because of blindness must work in darkness and the results express the relative productive capacity of the two classes of workers. If the number of those engaged be larger, and if some other trade be substituted for willow work, the effect will only be a difference in the magnitude, but not in the character of the results.

If confirmation of the conclusions deducible from this hypothetical case is needed, it is found in the evidence furnished in actual practice. There are several institutions in this country established for the instruction and employment of adult blind people in trades. The New York Commission submitted to each of them the question, "Is your institution self-supporting?" to which one replied, "Not yet;" one, "Nearly so;" and the rest, "No." It will be observed that none replied affirmatively. Some of these establishments combine a "home" or residence feature with the workshop, and upon this problem the New York Commission says:

"Your commission find that all attempts to combine industry and charity in the same establishment and under the same management have proved in every instance to be at best financial failures, and in its judgment such must continue to be the case since by its combination a premium is put upon idleness by giving the most charity to the least industrious person."

The implication seems to be that the financial loss is due to the employment of some workers described as the "least industrious." But if the most expert blind workman cannot compete with even the average of workmen who see, as is doubtless the case, financial success will not be achieved even if all the blind workers are of the best or most industrious kind. These workers will rarely be found to be equal in the quality and amount of work done, and hence there will always be some not necessarily less industrious, but less productive, than others.

Moreover, the combination of domicile and workshop is not demanded by social or moral interests to which indeed it is opposed. The only reason for it is financial, and grows out of the consideration that a given number of these workers can be supported en masse at less expense than if they were to be dispersed in the community; and with the cost of living reduced, the shop returns will more nearly equal the outlay and the cost of maintenance will be reduced.

That the blind themselves fully understand that inability to see is the cause of their industrial disablement cannot be doubted; and to those who have studied the problem long and seriously, blindness is the direct cause of their industrial insufficiency, the one irremovable and insurmountable obstacle which, if all other obstacles be removed or surmounted, will still prevent their recognition as competitors or as co-workers in industrial vocations. This is a significant fact, repugnant to the desires and feelings of us all and so it is natural that one who is accustomed to view every social problem from a philanthropic view point should feel that a satisfactory solution may be possible, through the correction of former or of present methods or by the adoption of new ones.

In other words, the community is not concerned so much with the fact than men are blind as with the fact that, being blind, they are not employed in concrete or industrial pursuits, and it is assumed that the reason why those who have attended schools for the blind do not work is that their education was not sufficiently concrete; that is, that blind boys and girls are not taught trades during their school period. Assuming for the moment that this proposition is true, and assuming that the education given is sufficiently concrete, we may point out the extent to which this recourse will restore the whole class of adult blind to concrete efficiency and equality.

In 1900, only 9.72 per cent. of the whole blind population of this State (New York) was under twenty-one years of age. Reductions because of eye troubles, infancy, general ailments, and other causes will reduce the number, so that those who can attend a school for the blind will not exceed five per cent. of all. Of this five per cent. about two per cent. are girls and three per cent. boys. Any attempt to make artizans of these blind school girls would be futile. As for the boys, even if all learned a trade, which would not happen, they would not be at economic parity with normal workers, for they will be subject to the law which regulates competition, as illustrated in the hypothetical case previously stated. The theory that the scholastic institutions should prepare the young blind for after life by instructing them "more concretely" in mechanical trades is neither new nor true, its exploitation having been begun in this country in 1832 by the first schools, and its falsity having been repeatedly and conclusively shown, not only by financial loss, but by educational and moral decline.

The schools in Boston, Philadelphia and New York were opened about 1832. The experience of any of these schools would be equally satisfactory as an early example of intensive, industrial, or concrete training of the young blind, but the efforts of the New York school only will be taken for illustration. The primary impelling purpose of this school was, as it still is, to give to young people of school age, who have lost their sight, an education equal in kind and degree to that given to other young people, who possess all their senses, subject only to those unavoidable limitations which the absence of sight imposes. The educational ends in view were clearly discerned, for they were identical with the universal objects of education, but the means, methods and practice by which to attain the desired ends had in the main yet to be devised and perfected; in short, the art and the science,

the pedagogy and psychology of the education of the blind had still to be worked out and established. In the beginning there were no available embossed books, no apparatus for tangible writing or for other school uses. Much that was suggested proved to be illusory and useless, and the best and most needed of these tangible utilities were so costly as to be unavailable.

Oral instruction, therefore, necessarily became the chief method of the early schools. By this method the pupils became unduly passive and silent, and their participation in class work was reduced to a minimum. Obviously, under these conditions, some mental and physical diversion was necessary, At the time under review, the kindergarten, the various forms of sloyd, and other methods of co-ordinate mental and manual training now followed, had not been evolved, and therefore there was no recourse except to the simplest branches of handicraft. Again, the fact that blindness is a disabling infirmity had not been recognized from an economic commercial point of view, and it was believed that the young blind could be raised and maintained at economic par and be made self-supporting through a course of industrial training.

This belief that competing power could be acquired, and that support and profit would be derived from handicraft pursuits, constituted a strong incentive to that persistence in effort that is essential to success in any enterprise, and which in no case could be more necessary than in this one.

Thus it will be seen that both by intelligent interest and by the inevitable trend of automatic operation, the early schools worked upon the lines of concrete instruction for a concrete end. The special efforts of the New York Institution for the Blind in New York City covered a period of thirty years and dealt generously, intelligently and exhaustively with every phase of the problem.

The first period extended from 1832 to 1845. In 1832 and 1833, the making of willow and mattress work, weaving and braiding of manilla and coir, floor and hearth mats, rag and list carpets, were introduced. Skilled instructors were employed, one having been brought from Scotland in 1833, to give instruction in these branches. Braiding palm was introduced in 1836, and paste-board box-work in 1838. In 1844 seven regular lines of boxes, besides many specialties in fancy boxes, were manufactured, while the willow ware comprised fourteen lines; and this variety was later increased.

During this period it was demonstrated that owing to various causes, chief among which was the lack of sight, of capital, and of needed assistance, the graduates could not individually compete with seeing labor, and therefore were powerless. These conditions so impressed the managers of the institution that they felt impelled to extend their efforts in a sphere of activity beyond that contemplated in the original purpose, and accordingly the institution undertook to relieve the situation by giving employment to its graduates, who should also reside on the premises.

This phase continued from 1845 to 1849, during which time the fact that the adult graduates were employed attracted the attention and stimulated the ambition of a number of adult blind people, who had lost their sight too late to enter the institution and who asked to be admitted to the shop, first as apprentices and later as employees.

During the first period, it was hoped that the proceeds from the finished products of the pupils' work would pay the cost of this department. In this as in other cases, outlay for education does not make return in money values and cannot be measured by commercial standards. Hence, there was no real basis for this hope which of course was not realized.

During the second period, however, the case was different. The well trained graduates were employed as journeymen at full time, the work of the pupil apprentices was utilized to better advantage than before, and success seemed at least more certain. Still it did not come and it was thought that the lack of success was largely due to the great disproportion between the number of apprentices and the number of journeymen which, owing to want of room, could not be increased. Moreover, the full benefits of division of labor could not be derived from so small a body of workers. These and other considerations, coupled with the desire of the outside adult blind, led to the third stage in the sincere and strenuous effort of this institution to prove, if possible, that the hand labor of those who have lost their sight can be made commercially productive.

This stage of the undertaking extended from 1848 to 1862. The purpose was to retain the plan already existing and expand it, so as to afford an opportunity for instruction and employment in trades to adult blind persons of good character, who were able and willing to learn and to work.

A substantial brick building, 200 feet on 8th avenue by 90 feet on 33rd and 34th street, was erected, affording a fine salesroom and ample space for work-rooms, the storage of large quantities of raw materials and finished goods and for all other purposes.

The trades and occupations which contributed to the wholesale and retail business comprised sixteen lines of plain and fancy willow work, eight lines of paste-board boxes, woven and hand-made mats, and rugs in great variety of material, pattern and color, mattresses, upholstering, braiding palm leaf, netting, hammock work, brushes, brooms, and a great variety of knitted and crocheted fancy goods.

At the inception of the enterprise, there was, as usually is the case, a call for goods based on sentiment, personal interest and curiosity. This, however, was soon supplied and the business then became subject to the usual laws of trade and of supply and demand.

It was soon apparent that the local wholesale and retail markets did not absorb the goods that were produced, samples of fine quality were sent out, and every effort was made to find a wider market in other States. The residential privilege which was accorded to the graduates first employed, and which had been extended to the adult blind, proved to be so undesirable and burdensome that at the beginning of 1855, after nine years of trial, and about two years after similar action for like reasons had been taken by the Perkins School at South Boston, it was found necessary to abandon it, and to require the employees to provide their domiciles.

After 1854, therefore, for a period of eight years, the enterprise assumed the character of an ordinary factory, with this difference, however, that while the ordinary factory might work on part time, with reduced help, or be shut down entirely when markets were overstocked, trade dull, or prices of raw material too high, the institution kept its blind employees at work, as otherwise they would lose the stipend upon which they were absolutely dependent.

Within the limits of this paper we cannot dwell in detail upon the promising experiments, the alluring expedients, the patient struggles, the unrealized expectations, and the financial losses which marked this effort from 1832 to 1862, when it was finally abandoned. Suffice it to say that although the resolute and intelligent purpose of the managers of the institution, and the buoyant hopes and dogged efforts of its beneficiaries and employees, were strongly opposed to such a result; still the long-sustained effort proved that in the handicraft pursuits the value of the labor of sightless

people is far below economic par, and that if all other infirmities be absent or overcome and all external obstacles be removed, still the lack of sight remains the one disabling infirmity which fully accounts for and explains this under value, and for which no healing has as yet been found in the industrial world.

Here it may be said in passing that the New York Institution for the Blind was not only the first and still is the only school for the blind in the world which measures its scholastic work by the same tests that are applied to the work in the public schools, but has also taken the lead in pioneer work along the lines of manual training. Besides the trades previously mentioned that were introduced, the sewing machine, knitting machine, chair caning, cooking and raffia work were first successfully taught at this school. Two young women, having just completed their school course, were chosen as demonstrators of the sewing and knitting machines at the Centennial Exhibition held in Philadelphia in 1876, and afterwards at State Fairs and in the company salesrooms in New York.

The knitting machine, although difficult to learn because of the dropping of stitches (which however our girls were taught to detect by the ear), seemed very promising because of the completeness of the articles made upon it; but, notwithstanding this and the thorough mastery of the machine that was acquired, its use on a commercial basis was not practicable. This is an illustration of the conditions set forth in the hypothetical case.

It may be pointed out that the power to detect by ear, in the midst of the whirring of several machines, the omission of a needle to take the thread, is doubtless the most remarkable example of the high discriminating power of the sense of hearing that has ever been attained, and well illustrates the nature of many of the problems of hearing and touch presented in the education of the blind, the discovery and solution of which would be impossible except at a special school. The knitting machine, however, proved to be of little value in manual training, while the dwarfing effects of its stated use upon a scotoic operator are well illustrated in a case related by Prof. Griggs, referred to later.

From what has already been said, it is obvious that the situation is prolific of stubborn facts and refractory conditions and on this point the symposium contributors are in accord. The general view is expressed in the following citations:

The Massachusetts Commission says: "The problem of devising wise and effective measures for providing the adult blind with adequate industrial training to the end that they may engage in healthful and remunerative forms of industry is an intricate and difficult one."

J. P. Hamilton, Superintendent of the Michigan Employment Institution for the Blind, says: "The problem of how best to care for and help the adult blind has not been solved. The work is new and necessarily in more or less of an experimental stage."

It has been shown that at least sixty-five per cent. of all the blind are too old to learn and to follow a trade, that about five per cent. are mentally or physically unsound, that ten per cent. are minors, that ten per cent. are self-supporting or in good circumstances, leaving not over ten per cent. for industrial consideration; that about three-fifths of the last number are males and two-fifths females, some single, others married, and residing in their own homes, in incorporated homes and in almshouses; that upwards of ninety per cent. of all received their education and acquired their trades and occupations while still retaining their sight; that beginning in 1832, persistent, intelligent, generous, and costly efforts have been made to impart

self-support and remunerative ability to both the young and the adult blind by industrial instruction in handicrafts; that the problem is an intricate and difficult one, that none of these industrial enterprises, past or present, have been or are self-maintaining; that the problem remains unsolved; and that from an economic, commercial point of view accumulated experience indicates that it is not commercially susceptible of solution. Keeping these things in mind, the statements, suggestions and recommendations presented in the symposium articles will repay careful consideration.

Doubtless the most significant statement relevant to the subject to be found in the fourteen articles of the symposium is that of Edward E. Allen, for many years past the Principal of the Institution at Overbrook, Pa., and formerly a member of the faculty of the schools at Boston and at Upper Norwood, England. Mr. Allen has served as a leading member of the Advisory Board of the New York Association for Promoting the Interests of the Blind recently formed in New York and for some years past has supervised a census of the adult blind of Pennsylvania. Mr. Allen says: "There is no single solution of this problem. . . . . That their case calls for study and alleviation there is no doubt. . . . . A manifest duty is before us, but what to do and how to do it is not yet plain."

When one possessing such rich opportunities for observation, experience and reflection as Mr. Allen has enjoyed becomes conscious of an existing obligation, for the performance of which neither means nor ways have yet been made clear, men of less experience should not be expected to offer a solution; and true educators and philanthropists will approach the question with deliberation and caution, unmoved alike by the appeals of sentimentality and the rose-tinted prophecies of the promoter in philanthropy.

The two State Commissions and the other writers favor industrial instruction and employment, but there is wide diversity both of opinion and practice as to the desirability of combining the trade school, the factory and the domicile.

Those connected with "working homes" favor an organization embracing all of these features. Those connected only with "workshops" disapprove the "home feature," while others advocate an entire separation of trade school, factory and domicile, except in the case of trade schools at which the apprentices may be provided with support. The New York State Commission of 1903 plainly stands opposed to the union of factory, as a business operation, with the home, as a charity feature. The Massachusetts Commission advocates industrial instruction and aid at home, and the establishment of State industrial schools and working homes.

The theory of the New York Commission seems to have been that if the adult blind are furnished with trade instruction in some cases, and trade instruction with some capital in others, supplemented with facilities for getting material and selling goods, they will then be able to maintain themselves against the rivalries of the labor market, and there will be no need for State workshops or for working homes. The theory of the Massachusetts Commission seems to have been that notwithstanding the work schools and the home aid, the labor of the blind will still not be at parity with the labor of those who see, and hence that State workshops and industrial homes will be needed. If the labor of the blind is adequately remunerative why should this question of a home come up at all in connection with the subject of employment?

The fact that it has been found necessary to provide a home as well as employment is in itself evidence that the labor of the blind will not bring an "independent self-support." But whether the object be to provide trade

schools only, or to provide a support ameliorated by trade schools and employment, the trade school members and the shop apprentices and workers should reside with the neighborhood families. Economy in the cost of support is the chief extenuation for the congregate "working home." When, however, one has lost his eyes, he all the more needs the use of the eyes of others, and this can be most freely secured through living in the usual relations with those who see. While it is true that private philanthropy may find the congregate home to be the best and perhaps the only mode of practical relief, especially in cities, this practice on the part of the State would be from a pecuniary point of view unnecessary, and from a social aspect it would be most undesirable and unwise.

The Massachusetts Commission would have the State continue its care over the trade school graduates. The New York Commission would let this duty devolve upon the community; or, in other words, upon the precarious support to be derived from individual contributions, administered and bestowed as charity.

The importance of fostering family ties and duties, neighborly acquaintanceship and interest, church membership and help cannot be too highly esteemed, but yet there seems to be something about the loss of sight in adult life which paralyzes action and renders suggestion futile, so that family and friends, the neighborhood and the church seem helpless, each looking to the other and all of them to some other source for aid.

Keeping these things and the lessons drawn from experience in mind, together with the facts in relation to location, and diversities as to race, sex, age, health, and domestic and denominational relations, it appears that the State alone can provide those large, compassionate and wise measures that will effectually meet the physical, social and intellectual needs of the adult blind, and relieve them from dependence upon the inadequate provision which genuine benevolence can at best make.

Earning a living and earning the going rate of wages are equivalent terms in the labor market, and the more clearly a business man sees that the blind can at best produce only a part of the product necessary to secure normal wages, the more certain will he be not to employ that kind of labor.

Beginning with the fifth year, the education of people having five senses requires about nine years in the primary course, four in high school, and four in college, thus making the students twenty-two years of age at graduation. When we reflect that education with only four senses, none of which can perform any vicarious service for the lost sense, is a much slower and vastly more difficult process than with five senses, the suggestion that blind boys and girls can receive the proper education of body, faculties and character that American citizenship requires, and at the same time be prepared and expected to find work as machine and process operatives at the age of sixteen, exhibits a temerity that is amazing.

Prof. Griggs, in one of his lectures, relates the story of a young girl who had been obliged to seek work in a factory. At first, she indulged in a little talk now and then, and when the end of the week came she found that her pay was short because her work was short. This taught her that she must not talk. She could not help thinking, however, and so she indulged occasionally in pleasant memories and anticipations. At the end of the next week, her pay was again short, and now she had learned that in order to perform the allotted task she must work as automatically and as insensately as the machine which she operated, but which in fact dominated the operator, body and mind.

Such an effort is obviously degenerating and brutalizing, and yet this is the lot deliberately proposed for the blind boys and girls of our State and country. The idea, however, is not a product of American thought, and will never be realized, at least in this country.

What has already been said has made clear the proper functions of schools for the education of our young blind people. Under present and prospective conditions these special schools are indispensable and their resources should be wholly devoted to the physical, intellectual and moral education of their pupils.

In so far as education from kindergarten to university has any direct and proper relation to vocation, the prime condition—life in darkness—unerringly points to callings that can be followed individually, by the use of hearing, touch and speech, and without the aid of sight or of muscular effort dependent upon it.

Industrial or trade instruction belongs to the post-graduate period of adult life, and it should not be allowed to trespass upon the legitimate work of the schools, which is mind-building and citizen-making. The New York Commission with great force says: "Some form of manual training for boys should take the place of the industrial training now conducted in schools for the young blind."

Education provides the only means by which our young blind people can acquire self-respect, social recognition, and vocational independence; the only way by which to avoid in later years that gloomy darkness and ceaseless craving of the mind which neither benevolence nor beggary can illumine or satisfy.

As I have been actively engaged since the fall of 1859 in work to promote the education and welfare of the blind, those who have had the patience to peruse this paper may desire to know my views on the general subject. In countries where the sovereignty is vested in one person, all others are subjects. The sovereign may bestow charity upon others but he cannot bestow charity upon himself. In this country the people are sovereign, and blindness deprives no person of his share in this attribute, and therefore any act done by the State in behalf of the blind is not charity but is an act of public policy to promote the welfare of the whole people, of which they are a constituent part.

This fundamental principle has been recognized by the people of this State, who have declared in their constitution that the Legislature may make such provision for the education and support of the blind as to it may seem proper. As public policy and not as charity, the State may therefore use the wisdom and the resources of the people for this purpose.

A plan for State action should comprise the following features:

1. The fullest educational opportunities for the young blind, as part of the educational system of the State.

2. One salaried Commissioner for the adult blind, to be appointed under the civil service, who shall devote his whole time to this work.

3. Instruction at home in manual training, including reading, writing, knitting, crocheting, hand and machine sewing, raffia and cord work, basketry, culinary and house-work, outdoor work, with suggestions as to ways and means of useful occupation.

4. Work-schools, with support for apprentices, wholly separate from any work-shop or factory.

5. Starting and establishing shop-school graduates in their own or in some other community when possible.

6. Workshops or factories for those who cannot be so established.

7. Attendants at shop-schools, and shop employees invariably to reside with families in the community.

8. A system for supplying raw material at cost and for the sale of products.

9. Statutory provision for admission into denominational homes of respectable, well disposed blind people of the same faith.

10. The support of respectable, well-disposed, friendless, or destitute people in good families whenever possible, but not exceeding three blind persons in any one family.

11. The support in residential homes of respectable, well-disposed adult blind people not otherwise provided for.

12. The care of disreputable, disorderly, or dissipated persons by the local authorities where such persons reside.

13. A bureau of registry and information.

14. Co-operation by relatives and the community.

But whether this work be done by the State or by charitable associations, no money should be appropriated or solicited upon the representation or expectation that scotoic labor will be commercially profitable or that scotoic workers can earn or ought to be expected to earn an independent self-support.

A Struggle in the Dark.

(By John Trowbridge Timmons, in the Saturday Evening Post.)

My life has been a struggle in the dark. For I am blind. But in the darkness I have light. I see through the remaining four senses.

I was nearing manhood when the real gravity of the matter presented itself to me. My parents were poor, and I realized that, if I lived as long as some of my ancestors, I would soon have to begin to do something for myself in life or become a subject of charity.

I did not enter school until I was in my fourteenth year, but, notwithstanding the fact that many impressions have been imprinted upon my memory, my mind still retains some very vivid pictures of those days, and I shall never forget the sound thrashing I gave Hon. William McCrate, of Nebraska, after he had bullied me into desperation, and I often wonder if he remembers the event as well as I do.

Not being able to read from the readers I was given the privilege of sitting with some pupil who read the lesson over to me a few times, and I went to class and repeated the reading lesson from memory. My history, geography and arithmetic were learned in a similar manner.

Not until I was past twenty-one did I learn I was entitled to attend the Ohio State School for the Blind, at Columbus, and, owing to my age, I was permitted to attend only one year. In that time, however, I learned much. Associating as I did with so many blind pupils of all ages, many of whom were very bright, and many who were to a great degree helpless, I determined to make a heroic effort to do something for myself.

His Start in Business.—Soon after I came from Columbus I started a small mail-order business, and with the aid of my mother, who read the letters and addressed the packages, I was able to build up quite a little business, and from some of my plans and advertising schemes, certain other persons, who had thousands of dollars to invest in advertising, which is expen-

sive, have been able to build up the largest card and novelty house in the country.

My first newspaper story of any note was an account of a cyclone that passed through the town and surrounding country, and did quite a little damage. My account of that storm, and my promptness in getting it to the various newspapers, secured me the position of news correspondent for several leading Ohio and Pennsylvania dailies. Through the kindness of Samuel J. Flickinger, editor of the *Ohio State Journal* in those days, I was enabled to submit and have published a number of special articles.

I consider I owe a portion of my success in life to the fact that I am and always have been a close student of human nature. Not being able to read the features of persons, I made a study of the voice, and I found it reveals traits of character, habits and disposition even more correctly than the features and shape of the head.

In submitting manuscript to the various publishers I have met with many difficulties. For several years I wrote with a pencil, by means of a grooved board upon which I laid my paper, and although my writing was legible it was not as clear as most publishers wish their copy.

I determined to purchase a typewriter, and when the machine arrived and I felt over the device I was discouraged, for it seemed intricate, and I thought I could never learn to use it. After being shown a few points, I soon found it was not near so difficult as I had at first supposed. Since that time I have done all my own correspondence and prepared all my copy on the typewriter.

In a personal interview with Professor Roy Knabenshue, the daring aerial navigator, he informed me I could write a more accurate description of just how the earth, with its rivers, mountains and cities, actually appears to one in an air-ship than anyone he had read who had travelled above the earth. He wanted to know how I, a blind man, could form any idea at all as to how things appeared, especially to one at a great height. All I could say was I did so from imagination.

Hits the Head of an Unseen Nail.—With careful management I have been able to build for myself and wife a very comfortable five-room cottage, which is situated at the edge of the town of Cadiz, Ohio, with an acre and a half of land, where I have built a small poultry ranch. When not engaged in newspaper work I am attending to my poultry. I have buildings and yards for eight different flocks, and depend upon the egg production for profit. I find if it is rightly managed it will yield a handsome little income.

In building the poultry houses I have done quite a lot of the work myself, and when it comes to sawing off a board or driving a nail I can do so as readily as one who can see. There is a peculiar sense, which I am not able to describe, that enables me to strike a nail directly on the head, even in total darkness. I have had men working upon my residence and poultry houses, and I could stand on the ground and tell the builder the length and size of certain pieces of timber to be put in certain places, and when they cut the material and tried it they found it to fit the place exactly. I am confident with a little study I could plan a house and specify every piece of timber in it, and if my plans were followed it would go together just like a piece of furniture cut by machinery.

Distinguishes Fruit by Feeling.—Providence has so ordered it that when one of the five senses is weakened or destroyed, the others, and more especially one, becomes more acute than the rest. I find this is true in my case. My hearing is excellent, and in delicate tests I have found I can hear sounds

that few others can detect. My sense of touch is extremely acute, especially in some ways. At night, when it is calm, I can walk along a sidewalk and feel a shadow, or atmospheric resistance, of every tree or telephone pole I pass, and should a person be standing at the side of a walk with which I am thoroughly acquainted, and I am not too deep in thought, I can tell the very moment I pass them.

Through the sense of touch I am able to gather different kinds of fruit and vegetables, and can detect the different varieties as soon as I touch them. Through the sense of hearing I am able to distinguish one fowl from another, and even when they are quite small I can tell the males from the females by the tone of voice.

I am naturally able to notice certain peculiarities in people. I have had persons talk loudly to me because they knew I was afflicted and supposed it required a greater effort for them to make themselves understood. I have actually known persons to talk loudly to a man who was lame, and it is very common for people to speak loudly to a foreigner.

The blind are, as a rule, the happiest class of people in the world. A great per cent. of them are musicians, and although they live in darkness they possess that light which makes life worth the living. I deem it my duty to make a bold struggle, and I feel that so far I have been amply rewarded, even if I do have to miss the pleasures of life obtained through the sense of sight. I am content with my lot, do not worry half as much as many I know who have all their faculties, and I am satisfied that, if I do that which is right in this life, I shall see perfectly in the life to come.

The Spinner.

(By Celia Myrover Robinson in Munsey's Magazine, May, 1907).

A beggar blind, she sat upon a stone
  Within the market-place.
Amid the surging crowd she spun, alone,
  A smile upon her face;
One paused and spake to her in wondering tone:
  "Why do you smile?" he said.

"The people jostle and the winds are cold;
  Thy hopeless eyes are blind;
Thy garments are too meagre far, and old,
  To fend thee from the wind;
Thou hast no silver in thy purse, nor gold,
  But beggest for thy bread."

"I am not cold," she said; "my heart is warm,
  I do not feel the blast."
"But hearken to the raging of the storm,
  The sun is overcast."
"I sit and spin," she said, "secure from harm,
  And think upon the Light."

"I do not see the squalor and the sin,"
  She said, "that flaunt so near;
Instead, my brooding gaze is turned within,
  And music soft I hear—
The voices of the stars—and spin and spin
  A garment strangely bright,
A cloth of gold to wrap my soul within
  When it is night."

The Story of the Blind Inventor.

(From the Toronto Mail and Empire, March 22nd, 1907.)

Those who know something about his work have declared that Dr. James Gale was the most remarkable blind man who ever lived. His death brings to mind some of his wonderful accomplishments, and his whole career should be an inspiration not only to persons who have lost their sight, but to others who are struggling against some lesser handicap, and, indeed, to the average man who has all his faculties to aid him. So triumphantly did Dr. Gale surmount his great obstacle that many persons who knew of him as a famous man never learned that he was blind. A personal interview would hardly betray the fact, either, for he would enter the room with a firm, quick step, walk directly to the visitor and shake hands, without any groping about. His eyes, to a casual observer, appeared clear and penetrating.

He Concealed his Affliction.—Dr. Gale was born in Devonshire, in 1834, and attended school before anything went wrong with his eyes. His first warning that anything was amiss came in the shape of a gradual lessening of his powers of vision. Boy-like, he was ashamed rather than afraid, and tried his best to keep his misfortune secret. When playing leap-frog with the other boys, he used to put a white handkerchief on their backs that he might see to vault them; and in the school-room he artfully contrived to place himself far down the line of reciting boys so that he could read off from memory the lessons. His determination to conceal his trouble was responsible, chiefly, for the complete blindness that came upon him, and what little chance of recovery he had, when his parents found out the secret, was destroyed by the ignorance of the local physician who undertook to cure him.

A Boy Inventor.—He grew worse, instead of better, and suffered so severely that once he was on the point of committing suicide. When the Plymouth oculist, to whom he was taken as a last resource, pronounced his final doom, young Gale shed the last tear that his misfortune was to wring from him. He was then sixteen years old. His father gave him his choice of having a couple of secretaries to read to him or entering an institution for the blind. He chose the former course, and soon found that by training his memory he could make good progress with his studies. So he kept on, to the astonishment of his tutors. His tastes were in the direction of chemistry, and even as a boy he made experiments that ultimately were to be of the utmost importance. He found out, for instance, that by mixing sand with gunpowder the explosive effects of the latter were destroyed. In later years he resumed this boyish investigation, with the result that he invented a non-explosive form of gunpowder.

A Medical Electrician.—His introduction to medical electricity, of which branch of the subject he was at the time of his death the most distinguished exponent, came about as a direct result of his blindness, for a medical man tried to restore his sight. Although the attempt was a flat failure, it interested Dr. Gale in electricity, and he made it a special study. Soon he began to receive patients, and such favorable results did he have that other doctors would send him cases for galvanic treatment. The secret of his remarkable success was a true secret in his case, for he always let the current he was applying to a patient pass through his own body. So sensitive was his sense of touch that he could tell to a nicety exactly what current was best adapted to the case in hand, and his very misfortune thus gave him an

advantage no seeing man could have. His hearing also was marvellously acute, and helped greatly in diagnosing.

One Fee $250,000.—Dr. Gale's name for the past few years has been famous in connection with a millionaire patient, who paid him the highest price on record, $250,000, for a successful treatment. This patient went to the blind doctor after Sir William Ferguson had given him just six days to live. Sir William advised Gale not to take the case, as it was incurable, and his reputation would be injured; but, after a careful examination, the blind man undertook it. The millionaire had gangrene of the big toe, and aneurism of the same leg. He was too old to stand an operation, and so it was with electricity and massage that Gale attacked the leg. Gradually he reduced the area of diseased tissue until he had it down to a spot the size of a dollar. He persevered until it became the size of a pin's head, and then disappeared. The delighted millionaire lived for several years afterward and expressed his satisfaction by paying the record-breaking fee of £50,000.

Inventions and Honors.—Rapid-fire breech-loading rifles, burglar alarms and electrical clocks are a few of the many things Dr. Gale invented in the course of a long and busy life. All the time he was a practising physician, and besides was interested in many business projects. When the Briton Medical and General Assurance Company failed some years ago, Dr. Gale was appointed to represent the policy-holders, and he managed the company until it was taken over by the Sun Company. He was electrician for the first telephone company in London, and consulting engineer in the heating of the Bank of England. He founded at least one institution for the blind, and on two occasions was summoned before British Royalty to hear his work commended. He also received recognition from the late Czar of Russia and Napoleon III. of France, besides having many degrees and honors conferred on him by universities and scientific societies. His sudden death removes a man who was made of heroic stuff, and one whose example should prove a source of encouragement as long as his name is remembered.

Portable Printing Apparatus for the Blind.

(From "La Nature," Paris, 22 December, 1906.)

M. E. Vaughan, director of the Hospital of the Quinze-Vingts, has recently invented a little portable printing case which enables the blind to write henceforth, in ordinary characters and consequently to communicate with anybody. It is known, indeed, that the blind use for reading and writing the system of points in relief invented by Braille, in which the words and phrases are constructed by these points properly combined. To read, the blind feel the points with the finger; to write, they form their text in Braille points with the help of a bodkin and of a grating passed under a sheet of paper. The portable printing case for the blind is a box which encloses in its lower part printing types, and on the other side a grating intended to receive the types for a composition. The types used are cast specially by the firm of Allainguillaume & Co. of Paris; they have at one end a letter in the Braille alphabet, and at the other end the equivalent Roman letter. These types are also provided with a longitudinal tongue placed at the base of the letter, of which it indicates the direction. The tongue permits the placing of the types vertically in the grooves made in the grating. The mode of using the printing case is as follows: The types are placed in the left grating, and the Roman letters press on a perpetual inker. The blind person recog-

nizes the Braille letters by touch; he can take them one by one to compose words. For this purpose, at the right, is found a hinged grating, under which is slipped a sheet of paper to receive the impression. The blind person can then take the types and place them in the right grating, going from left to right. The types so placed side by side touch each other. To separate the words, the groove which immediately follows the last letter of the written word is left empty. When all the types are in place, the exercise of a weak pressure suffices to print the letters upon the sheet of paper. The same apparatus enables a person who does not know the Braille alphabet to write to a blind man; then the inker is not used. The types are placed in the left grating, care being taken to put at the top the Roman letter in such a way that it may be seen by the operator. He composes his words letter by letter, and places them in the right grating, proceeding from right to left. A pressure is then exerted upon a sheet of paper placed as in the preceding below the grating; the Braille letters are printed in hollow, and the pressure to be used depends upon the thickness of the paper, which, so figured, is returned and read by the blind person by touch from left to right. This invention appears most practical and of a nature to render important service to the blind. The portable printing case for the blind may be obtained at the bookstore of Hachette & Co., 79 Boulevard St. Germain, Paris.

Books and Papers for the Blind.

(From "La Nature," 9 February, 1907.)

Attention is given in these later days to the question of special printing for the use of the blind. "La Nature" has described the interesting "portable printing case for the blind," invented by M. Vaughan. At the same time that the Vaughan system was described here, a leading English journal announced that it was going to publish a regular edition for the blind in Braille type. It added that the printing of it would be done back to back, that is to say, that the blind man, in turning his page, as the seeing do, could continue his reading and follow it without interruption. We shall describe this method of printing with the greater pleasure because it was invented in France by M. A. Balquet, chief of the special printing office of the National Institution for the young blind at Paris (Institution nationale des jeunes aveugles, 56 Boulevard des Invalides, á Paris).

The blind now use the conventional system of pointing invented by a blind man, Louis Braille, Professor at the Institution in 1827, with abbreviation signs by Charles Barbier.

Braille's system has for its base ten fundamental signs with which the ten first letters of the alphabet are obtained. By adding one or two points under each fundamental sign, new series of ten signs are obtained, without having more than three points in height or two in width for the most complicated character; the conventional signs corresponding to the figures are also obtained.

The casting of types for printing, in cubes, was undertaken, bearing these points in relief and enabling one to print them by a sort of honeycomb upon sheets of special paper, that is to say, at the same time soft enough and thick enough.

This was realized by the successive efforts of Messrs. Martin, Director of the Institution; Oury, a former pupil, and Gustave Peignot, master founder, at Paris, who reduced to practice the casting of type and created "the typographical material for the blind."

But the types so obtained could print only on the obverse; the reverse of the pages was then unutilized. M. A. Balquet, in 1899, conceived the idea of special typographical characters which would permit the simultaneous printing of the two sides of the page. This invention, which is of an extreme mechanical delicacy, does great honor to its author, whose modesty is such that it is necessary to beg him to speak of it in order to obtain the description; it has besides been subjected to the legal formalities "of deposit" and they risk only what this may be to make it known. On the contrary this will certainly be a means of hindering it from coming back to us from England, or from some other country.

The invention of M. A. Balquet rests upon a mathematical disposition of the types having for its principle the inverse symmetry.

This is what it consists of: M. Balquet thought of placing upon the same typographic character, by the side of the points in relief, six little hollows intended to receive the reliefs of a corresponding type.

Any two types, opposed to one another end to end at an inclination of 180 degrees, fit then exactly; the points of the one (whose number never surpasses six) enter into the hollows of the other and reciprocally. That being fixed, compose a text of a page with these types; then compose in the same way the following page by continuing the "copy." Interpose a sheet of paper between the two forms; print with a foot press. We will obtain the impression of a text in Braille characters obverse and reverse.

It is easily seen how much this system has from the start condensed the books intended for the blind while rendering them also more economical in working off and in paper. But furthermore, it became possible to print thus real newspapers for the blind and they have not been lacking.

Before the application of the Balquet system, the Association Valentin Hauey already printed special sheets, the "Louis Braille" and the "Revue Braille," by the aid of double sheets of metal. That was costly and naturally no correction could be made upon the sheets; the words and the letters remained irremediably fixed.

In July, 1902, the distinguished blind philanthropist, M. Maurice de la Sizeranne, was able to obtain the Ministerial subvention needed to create a typographical installation of the Balquet system, which was entrusted to the blind sisters of St. Paul, Denfert Rochereau street, Paris.

It goes without saying that the printing office of the National Institution for blind youth, Boulevard des Invalides, Paris, of which M. Balquet is chief printer, works with the same perfected material. Blind people also use typographs. It is a marvel to see them proceed, not only with the composition, but also with putting in the form, and even with working off 500 sheets an hour, giving the impression to four pages at the same time. A single person in the staff, dumb and full of skill with these typographers whose "eyes are at the end of the fingers," has according to the phrase used "a corner of sight;" it is he who does the margining of the sheets, that is to say, who places exactly in the mechanical press the sheet which is to be worked off; only a seeing person can avoid, in doing this task, grave and mournful accidents.

The organizers of these printing arrangements, so remarkable of their kind, found two special co-operators who have been precious to them. First, it was M. Gustave Peignot, the late master-founder, who knew how to appreciate the merit of the new invention, and who studied with particular care the "fount" of the Balquet type. The casting of type for printing is always a very delicate operation; the types of which we speak present special difficulties which have been very happily surmounted. Again, a machine for

printing, equally out of the ordinary, was required. It was studied out and constructed by the firm of Marinoni.

The machines for printing for the use of the blind, before the invention of the Balquet type or "interpoint type," were ordinary printing machines with "marble" placed under a cylinder which made the impression; the inking accessories had simply been omitted.

These machines, which were all right for impressions in which the sheet was printed on one side only, could not be used for printing "interpoints" obverse and reverse.

But the machine which has just been constructed for answering this new need is based upon the principle of the foot machines used for common printing of small sizes. Solidly set up, to resist the relatively considerable pressure of simultaneous printing in relief on both sides of the sheet, it comprises two stones, each bearing one of the forms of "interpoint" set for working off. The sheet is margined upon the lower marble and in the movement of the machine the two forms coming to fit one upon the other, it is printed by a single stroke of the two sides. It is necessary, to obtain good impressions, that the hollows of each type should place themselves exactly in face of the reliefs of the type opposed from the other form; that necessitates a perfect adjustment of the movable parts of the machine, which has been realized.

Thus the books and newspapers for the blind are composed and worked off by the labors of our inventors and of our French mechanics. To our knowledge, foreigners have not found any other arrangement more practicable, nor one answering better to the difficult programme of accomplishing this very particular scheme of typography.—Max de Nansouty.

The Telegraphone.

(From the Vancouver Washingtonian, 21 December, 1906.)

That Valdemar Poulson's invention, the telegraphone, will open up a new world to the sightless is the opinion of leaders in the work of making the life of the blind worth living. So great are the possibilities of this instrument that institutions are studying it with the most careful attention. They say it will bring within their reach all the advantages of education, study and entertainment more rapidly and at far less expense than is possible with any of the systems for teaching the blind now in use.

One of the most enthusiastic advocates of the telegraphone, and the first to point out its possibilities, is Dr. George M. Gould, of Philadelphia. Dr. Gould ranks among the foremost ophthalmologists of the world, and is an expert competent to speak with authority. He said recently:

"As a means of instruction for the blind the telegraphone is ideal. I cannot imagine a more rapid and effective means of placing at their command all the learning and science of the world, and thus encouraging and arousing their mental, educational and social progress.

"I have talked into the telegraphone in every pitch and tone of voice; the machine has immediately reproduced what I said with the same qualities of pitch, timbre and intensity and without any mechanical or other unpleasing effects.

"Whole libraries can be read into the telegraphone by skilled readers or expert elocutionists. Lectures, concerts, recitations, may be had at will. The ludicrously cumbrous, expensive and wearying letters and libraries for the blind—the Braille, New York point, line letter, Moon type, etc., of what use will they be now? The telegraphone will take their place.

"There are seven hundred thousand blind persons in the civilized world, and benevolence has long vied with charity in lightening the burden of their affliction and mitigating the tragedy of their lives. To place within the reach of these this most helpful device would put them at a bound so in touch with one another, and with such profitable employment that other charities in their behalf would lessen in demand and in significance."

Although based upon an entirely new principle in physics—the localization of magnetism—the machine is very simple in its operation. It consists of two cylinders mounted about six inches apart, over which runs a thin steel wire passing between the poles of a double electro-magnet. Records are made by the effect upon an ordinary telephone transmitter of sound vibrations which are stored upon the wire.

To hear the record the cylinders are reversed by a push button and started again in the same way. Ordinary telephone receivers are then placed to the ears and the sounds, whether vocal or instrumental, which have been recorded on the wire, are heard with perfect distinctness. Telephonic conversations at any distance covered by the telephone are recorded and reproduced in the same way.

For dictation purposes thin steel discs are used instead of wire, but the operations are the same in each case. In this way the blind can correspond with each other, the discs being so light that they can be mailed as merchandise for two cents. They can be used over and over again, passing a magnet over them removing all trace of one record and making it ready for another.

Special arrangements will be made with institutions for the blind for the use of telegraphones, which are now being made in this country. In this way all the advantages of instruction and entertainment afforded by the new invention will be brought within the reach of every one of some fifty or sixty thousand sightless Americans.

Is there a Sixth Sense for the Sightless?

Thus with the year
Seasons return, but not to them returns
Day, or the sweet approach of even and morn,
Or sight of vernal bloom or summer's roses,
Of flocks or herds, or human face divine,
But cloud instead, and ever-during dark
Surrounds them.—Milton.

To make a journey from the Atlantic to the Pacific coast afoot would be a strenuous performance for a person with sight. Yet G. N. Hayward, of Savannah, Ga., a blind man, has undertaken it.

Mr. Hayward is forty years of age. He left Savannah on November 19th last, declaring that he would reach San Francisco by the middle of April. He passed through Jackson, Miss., in the middle of January. Judging by the time taken to make that distance, he will reach San Francisco upon schedule.

Most of his travelling is done by night. Do you know why?

Blind persons will tell you that they have more trouble preventing persons with sight from walking into them than in keeping out of the way of others.

Being blind, of course, the lone traveller can walk as well at night as by day. In fact, he finds fewer obstacles in his way. Most of his travelling is along railroad tracks. He is able to tell when he comes to bridges and then carefully makes his way across. He is warned of approaching trains by the vibration of the rails.

"I have travelled 32 days," he said upon reaching Jackson, "and have made an average of 20 miles each day. I have no fear of accidents or of encountering obstacles. Unless bad weather or an unforeseen misfortune prevents, I am certain that I will reach San Francisco by the middle of April."

Hundreds of sightless persons wander about the streets of a large city. Have you ever wondered how they find their way so accurately, how they pass safely through crowds, and over street crossings? Don't you wonder how they find their way home?

Yet one seldom hears of a blind person getting lost or being injured. Does it not seem as though a mysterious power lightens their misfortunes and guides them—perhaps by means of a psychic sense which other men do not possess?

A blind negro in one of the largest cities earns his living by delivering market goods. For more than twenty years he has been employed thus, and has carried baskets of marketing to customers living in all parts of the city.

Guided in a Mysterious Way.—This man is familiar with every street in the city. He can go to the outlying sections or to any of the many obscure streets in the central part of the city; he passes through dense crowds, crosses streets congested with traffic and boards trolley cars. He has never suffered an accident.

Some mysterious sense tells him when he is approaching an object. Before reaching it, and without touching it, he can distinguish a telegraph pole, a mail or a fire alarm box.

"I feel it on my face," he explains; "I don't know how, but I seem to feel the impression here," moving his hand vaguely across the lower part of his face. "When I get near a telegraph pole or a mail box I know it. How? It just comes to me—and I'm seldom mistaken.

"It took me three years to learn when I was approaching an object. At first I found considerable trouble in getting about and began using a cane to guide me. I had to wait at street crossings for some one to pilot me across. Gradually I developed the sense of feeling objects before me.

"At first I occasionally got an impression of something in my way. I would stop and go slowly. Usually I found my fears were true and that there was something before me. Sometimes, however, I ran into the obstacles, and again would stop when nothing impeded my progress. Now I am seldom mistaken. I have no fear of going into any part of the city and can get along as well as when I had my sight."

Blind Builders.—One would scarcely imagine sightless persons building a house, laying the foundation, stone on stone, erecting the framework, building stairways and putting on the roof, nailing all boards with the precision of expert carpenters.

Two blind men recently finished a house at Berkeley, Cal. Without any assistance whatever, Joseph Brown and Joseph Martinez constructed a one and a-half story bungalow, complete in every detail. It is regarded as one of the prettiest little houses of the city. These men lost their sight early in life, and peddled goods from door to door throughout the State. They lived together in San Francisco, saved their money, and in time accumulated a snug bank account. During the fire which followed the earthquake all their property was destroyed. But their bank account fortunately remained intact.

They pooled their money, purchased a lot at Berkeley, and started the bungalow. They worked at night, as well as during the day, noonday and midnight being the same to them, and crowds of spectators followed their

progress with deep interest. When the house was finished mechanics declared it an excellent job.

Blind Publishers.—Lute Wilcox, a publisher, of Denver, Col., several years ago took four blind men into his establishment to help him. He assisted them in every possible way; they learned every branch of the business and to-day three of them own periodicals published near Denver.

"There is scarcely anything," a noted authority said recently, "that blind persons cannot do, except painting. Make them believe they can do it, and they will accomplish almost anything a seeing person can. The reason the blind are not employed to a greater extent is because business men won't believe they can do what they claim."

There are many blind typewriters; quite a number are earning their livelihood by this occupation in England. Miss Helen Keller recently opened an industrial exhibition in New York, where blind typewriters, telephone switchboard operators, and machine and hand sewers were at work.

Of course the blind typewriter could not very well use a system of shorthand, so instead of taking dictation by stenographic notes, she requires a phonographic record of the work to be done. This system of dictation, however, is used quite extensively in business houses, where ordinary stenographers are employed.

Blind typists make few mistakes. They are compelled to rely so absolutely on their sense of touch that perception through the fingers becomes abnormally developed.

Were you to go into a telephone exchange and see a blind girl answering calls, plugging each hole where the call drop clatters, and making every connection correctly, you would be amazed. Yet there are blind telephone operators. Quite a number are employed to take care of private exchanges, while there are several in the employ of the big telephone companies in New York.

If you observe the operator carefully, you will notice that with head bent she listens attentively. All her faculties of perception are concentrated in hearing; she determines the right call on a switchboard of several hundred numbers.

Is there not some reason for believing the girl possesses a psychic sense —a mind conscious of those mysterious, hidden vibrations as subtle as the thought waves of the telepathist?

Put a blind person in a store, and in a short time he will know the position of every box, the prices and varieties of different articles.

At a well-known eastern school for the blind a class in physics may be found nearly every day eagerly "watching" the practical demonstrations of the instructor. He stands at one end of the room conducting his experiments, while all the members of the class face him attentively, seeming to watch every movement of his hands.

Of course, one appreciates the great aid which an abnormal development of touch and hearing gives the sightless. But what is it that enables blind boys to play football, to run footraces fearlessly, to do many things with dash and confidence that would seem only possible to the seeing?

When asked his opinion as to the possible development of a sixth sense in the sightless, Superintendent Edward E. Allen, of the Pennsylvania Institute for the Instruction of the Blind, replied:

"Scientists differ on that point. You might say there is a sixth sense of the blind, just as there is a muscular sense among ordinary persons. The perception of the blind is really remarkable, but I think their develop-

ment of the senses of touch and hearing is only to be expected because they must rely absolutely upon them.

"Blind persons in this institution can tell my mood—whether I am pleased or not—by the sound of my voice, even when I think my voice is unchanged. A blind person can enter a room, crack his fingers, and tell the distance from the door.

"I can send a blind pupil into a field to find a tree, and usually he will walk up to it. The pupils here play football. After throwing the ball they listen, and as soon as they hear the sound they run for it. Whether these instances are evidences of a sixth sense or not is a question.

"Some assert that the blind ascertain the presence of approaching or approached objects by feeling a back current of air on their faces. It is significant that they cannot tell the presence of low objects—only those that reach their faces. They will fall over a wheelbarrow, but will stop short upon approaching a tree or wall. This seems to indicate that the face is the seat of receiving impressions.

"The public does not seem to realize that by educating sightless boys and girls we open up to them a world of their own, in which they do not need nor ask pity, but in which they are completely masters of the situation.

"Athletics is probably one of the greatest agents we have for producing that physical activity and desire for competition which count for so much in making a living."

Persons who witnessed the athletic contest of blind boys at a large school some time ago marvelled at the feats they performed. The running contest was unusually thrilling.

Sprint Fast without Fear.—Imagine a blind boy running at full speed, not knowing what might be thrust across his path to trip him. The runners are guided by holding spools, which slide on wires stretched in the right direction. Starting at the report of a pistol, they run until they touch a fine string across the track at the goal.

At this school the boys engage in jumping contests, football, performances on the trapeze, potato races, walking races, stilt races and hammer throwing.

Records made by the athletes in some of the former contests are astonishing.

For instance, one boy in a standing broad jump has cleared seven feet nine inches; another has gone over seventeen feet in a running broad jump; a twelve-pound shot has been put over 37 feet, and a discus has been thrown 85 feet. One runner made 100 yards in twelve seconds—a record which sprinters of world-wide reputation have beaten only by something like two seconds.

Skill and courage are required to climb to the ceiling hand over hand on a rope. At this school are several boys who can climb to the ceiling, a distance of fifty feet. Sometimes they swing from rope to rope, swinging through the air, and performing feats which would make a person with sight turn away with a shudder. The boys also perform on a trapeze, starting from familiar points in the gymnasium, running and catching the trapeze with unerring grasp on a jump.

The theory that the sensation of approaching objects is felt on the forehead by the pressure of air seems contradicted by the statement of Dr. Emil Javal, who declares that usually the blind receive a sharper and clearer impression of an object when approaching it slowly, and the pressure of the air is less strong than when travelling at a rapid pace.

Some scientists assert that the tympanum acts as a receptor of vibrations and the blind determine objects by auditory impressions. Yet there have been cases where the ears of the blind were plugged with wax and they unerringly found their way and discovered obstacles before them.

An interesting case cited is that of M. Ferrari, a blind professor in the Institute of Montpelier, France, who can tell whenever there is a flash of lightning before the sound of thunder reaches him. The only explanation is that the electrical vibrations reach him and make an impression on the senses as light.

His Perceptions Never Fail.—W. Hanks Levy, author of "Blindness and the Blind," states that he can tell an object before him, whether it is tall, short or bulky. He is entirely sightless. If friends lead him into the country, he can tell when they approach a fence, whether it is of open palings or boards or if it is a stone wall.

The man's ears have been plugged with wax, yet his perception has never failed. He declares he receives the impression through the skin of his face.

There are cases of blind men who ride horseback; others who have taken up bicycling as a recreation; still others who have become proficient rowers and swimmers.

Examples of the most delicate and finished embroidering done by blind women are often seen at exhibitions of schools for the blind.

A Watch for the Blind.

Timepieces for the use of the blind are made in several forms, but all are expensive. A recent invention of George Meyer, described in "La Nature" (Paris, July 27), may be sold at a reasonable price and is said to be effective, it being possible for a sightless person to tell the time within one minute by the sense of touch. "The hours are indicated by movable buttons in relief on the dial. A strong pointer shows the minutes. The blind person passes his fingers over the dial; the button indicating the hour he finds to be depressed, while the position of the hand gives the minutes. The buttons are held by a circular plate beneath the dial, which has at one point on its circumference a notch into which the buttons drop, one after the other, as the plate revolves with the movement of the works. This plate, in fact, serves instead of the ordinary hour-hand of a watch. To avoid an undue loss of motive force due to the necessity of rotating the plate, the inventor has furnished it with a little spring of its own, so that, although controlled in its rotary movement by the machinery of the watch, its weight does not affect the main movement."

Blind Clock Mender.

(Kansas City Star.)

Charles Walters, who lives on Argentine Boulevard, Armourdale, is an expert clock repairer, although he is totally blind. Mr. Walters was graduated from the Kansas State Institution for the Blind twelve years ago. Clock repairing is not taught in that school. Mr. Walters learned it shortly after graduation, and has since been engaged in the business. He took a course in piano tuning in the State Institution, and he still does some of this work. Success in tuning musical instruments depends almost entirely on the ears and the eyes are not an important factor. Many blind people follow this profession. Mr. Walters takes the more pride in his clock re-

pairing because few blind people have attained success in this line of work. It is interesting to watch Mr. Walters repair a clock. As he takes it to pieces he does not place the wheels and other parts in order before him, as one might imagine he would. They are piled together on the table, but when he begins putting the clock together he has no difficulty in finding the parts as he wants them. When he picks up the wheels and other delicate parts and adjusts them without any hesitation, it seems as though he works largely by intuition. "No; I can't fix a watch," said Mr. Walters. "There is, of course, a limit to the sense of touch. The parts of a watch are so small and delicate that they cannot be adjusted without the use of the eyesight. In most cases the eyes must be supplemented by a magnifying glass. But I can fix any clock that's made. I have felt that if I had my eyesight I would rather be an expert jeweler and watch repairer than anything else. Since I was a small boy I have had a special fondness for taking intricate machinery apart and putting it together again. Now when I have no clocks to fix and am lonesome for something to do I will get out one of the old clocks I have on hand and take it apart and put it back together just for the pleasure I find in the work."

Physical Culture.

Mr. Ramsay, the Supervisor of Boys, reported that, following the plan inaugurated in the preceding year, a visit was made on Saturday, December 1st, to the Physical Culture class of the Young Men's Christian Association in Brantford. Ten pupils of the O. I. B., representative of the intermediate class, took part in the class exercises and contests in the Y. M. C. A. gymnasium. This participation (with necessary limitations) in the games, athletics and gymnastics of sighted boys, of equal age and physical attainments, is beneficial to the blind pupils in many ways. The latter will learn from the former some new and hitherto untried movements and "stunts," but, what is more important, this commingling begets in the blind pupil confidence in his own ability, which is a more to be desired result of physical training than dexterity in calisthenics, ability in gymnastics or prowess in athletics, though these are the means by which the desired goal is attained. The O. I. B. pupils were shown every courtesy by the Y. M. C. A. boys and they also found in Mr. Clark, the new Physical Director, just such an interested friend as was Mr. Fred Grobb, who was Mr. Clark's predecessor.

Delay in finding a successor for Mr. Ramsay, the measles epidemic and other causes interfered with the boys' gymnasium and outdoor work during the first half of the year 1907, and the exhibition of field sports, which had been planned for the first week in June, had to be called off on account of the unavoidable absence of Mr. Atkins, who was summoned to the deathbed of his mother. The local record in Athletics for the session of 1906-07 cannot therefore compare with that of the preceding year. Mr. Atkins superintended the construction of three running tracks, with wire guides, one for the girls and two for the boys, which were largely patronized in the fine days preceding the close of the session in June. The consumption of bread and the wear of shoes both increased notably after the cinder paths were completed, and some good records of speed were made.

The boys at the O. I. B. play football, but they have not yet become sufficiently proficient to venture a challenge to the seeing players in the Public Schools.

The pupils are indebted to Messrs. Burnley Bros. for the free use of their rinks for both roller and ice skating.

Athletics Among the Blind.

(By Stanley Johnson in the March, 1907, American Magazine.)

The most remarkable football team in the United States does not approve of the forward pass. This fact, however, is hardly an argument against the reformed game, for the team in question wears the colors of the Kentucky Institution for the Education of the Blind and is made up entirely of blind pupils of that school. Naturally, the forward pass, difficult enough of execution by sharp-eyed players, is impossible for them. Yet at straight football they can play with the best of their age and weight in the region around Louisville, and ask no indulgence except the elimination of goal kicking and a spoken signal when their opponents put the ball in play. Doubtless this football team is not the most astonishing achievement of blind education, but it is an achievement in a new direction, and it points out in a fresh and unexpected way the extraordinary results which have come from Dr. Howe's pioneer school for the blind, conceived in Boston in 1829.

Many instructors of the blind have felt for some years that bodily exercise, spontaneous play, sheer physical self-reliance were features of training sadly neglected. For this reason gymnasiums were built, and outdoor playgrounds provided in several institutions. But it remained for the Kentucky school to go a step further. Three years ago a football team was started there. The experiment, when it became known, was viewed with amazement, but Mr. Huntoon, the superintendent of the school, went persistently ahead. Hours were spent in daily drill, but even so the first season did not find the team in shape to meet other elevens. For one thing, the team had to be picked with quite as much if not more regard for mental agility than physical strength, and as some of the players were comparatively frail and very light, it required long training to put them in condition. The second season, however, found the team entering into active competition. They played nine games, won one, tied three, and lost the rest. Last autumn, their third season, the team made a still better showing. Averaging only 118 pounds, they played both the Louisville High School and the Manual Training School to a standstill, and their second eleven defeated the second teams from these schools, and did it brown. Meanwhile, two other blind football teams had been formed, at Overbrook, Pennsylvania, and Columbus, Ohio. An attempt was made to arrange a game between the Columbus and Louisville elevens, but without success. Another season may, however, find annual contests begun, the first of their kind in the world, and the strangest.

How these blind boys play, on equal footing with seeing boys, a game which requires so much speed, agility, physical courage and, one may add, alertness of eye, must always, perhaps, pass the comprehension of the normal man. The centre, guards and tackles of the Kentucky team last fall were totally blind. Three of the back field had what is known as light perception, but on rainy or cloudy days it availed them little. It was a special rule in all their games that the goal kicking should be abolished, and that their opponents should cry "Pass" when the ball was put in play. Otherwise they played the game without fear or favor, and neither asked nor needed sympathy.

A dozen questions have probably occurred to the reader. How do they know who has the ball? They DO know; they are absolutely certain; they always tackle the right man. They themselves say they know it because

Running Track.

the feet of the man who is carrying the ball strike the ground with a shorter, sharper, more intense blow than the feet of the interferers; and they dive unerringly for that sound. Certain seeing players have the knack of telling what opponent is going to carry the ball before the play begins by the way he plants his feet. It does not seem incredible, then, that blind players can locate him by the sound of his running. How they get under the ball on the kick-off and on punts is another question. As a matter of fact, they are not successful in getting under kicks. With the exception of certain of the back field, who have partial sight—and they only on very bright days—they make no effort to catch the ball. They wait till it strikes the ground, and then spring for it guided by the faint swish the pigskin makes as it goes through the air. A football is one of the most perverse of all inanimate objects when it bounds, owing to its shape, and it would seem as if the seeing players had an immense advantage in capturing it. Yet that faint swish is to the blind boys almost what eyesight is to their opponents, and though they doubtless dread a punting game, their record does not show that it has spelled disaster for them.

The forward pass, however, is something which they cannot successfully combat, nor even attempt to work themselves. It was their good fortune last fall to meet teams that could not work it successfully, either. The new rules, with their resultant complicated plays, had not sifted down much to the minor secondary school teams, and the blind boys were opposed by their own game—old-fashioned, straight football. As one of them said the other day, if the forward pass, trick end plays, and a lot of punting had been employed against them they would have had little chance to win. For them, at least, then, the old game has its advantages and even a professorial reformer could scarcely have the heart to rob them of it. If a stone-blind boy can be taught to dive into scrimmage, to plunge with the ball against an opposing rush line of sturdy chaps with two good eyes, to tackle in the open field—and always to play the game without a thought of concessions to his weakness, on an even footing, to win—he is in a fair way to achieve a physical as well as a mental self-reliance that will make a whole man of him and put him on a basis of equality with his normal fellows throughout his life.

The boys of the Kentucky institution have a track team as well as a football eleven, and two or three nines, also. Their track team meets seeing teams and has known the taste of victory. But it is hardly so remarkable that a blind boy should put the shot or run down a lane between cords or make a good standing jump. The pole vault, hurdles and running jumps are eliminated. That blind boys should play baseball seems strange enough, however; and as a matter of fact their game is so modified that contests with seeing teams are out of the question. The pitcher makes every effort to hit the striker's bat, by gentle and judicious tosses. The catcher sits on the ground and gathers in the ball with arms and legs, on the first bound. "If he has partial sight," Mr. Huntoon says, "he glories in a standing posture." A seeing person sounds a whistle, if a hit is made, for the number of bases the man at the bat is to go. If the whistle sounds four times the striker does his best to come home. Often a team mate with partial sight accompanies a totally blind runner round the bags as a guide. Obviously this is not baseball as we know it. But the shouting of the players, the cries of the captains and coaches, the excitement of the game proclaim it a very real sport. And to cultivate genuine sport among the pupils is now recognized as an important work of blind education. Not only is its effect on the minds of the pupils salutary, teaching them reliance, the restraint of temper, fair play, cheerfulness, but their bodies are greatly improved. One year of phy-

sical training in the Kentucky school showed a gain in total strength among the boys, according to Dr. Sargent's system of measurement, of 18¾ per cent. And among the girls the gain was even more marked, 42 per cent. Their gain in leg strength was 75 per cent., which seems to indicate that the blind girls are especially in need of bodily exercise. The superintendent of the Kentucky institution is thoroughly convinced that the time will come when the gymnasium and the athletic field will be essential parts of the equipment of every school for the blind. Dr. Howe, years ago, enunciated the philosophy of the work he had begun.

"Better a bruise or a bump than not make their own way about," he said of the blind. "If an ordinary child falls over an object he is encouraged to jump up and try again. The blind child should be treated in the same way. The other children may wander abroad to gather courage and strength by facing dangers and overcoming difficulties; but this dear pet, who has the sorest need of all to be trained to hardy self-reliance, who should become strong of limb and supple in joint, he must be wrapped in flannel and kept in the rocking chair to grow pale and flabby and awkward and timid, because his mother loved him not wisely, but too well."

Surely the athletic field and the gridiron are not places where any boy is likely to grow "pale and flabby and awkward and timid." Even more than in the education of the normal child, they have their mission in the training of the blind.

The blind man with his tin dipper, blue goggles and piteous appeal on a pasteboard card hung round his neck, has so long been the symbol of mendicity that it would doubtless astonish many people if they should count up the actual number of blind beggars they meet, even including the impostors. For each blind beggar are a hundred able-bodied men who beg a living in Madison Square from a constitutional aversion to honest labor. There are, according to the latest statistics, 64,763 blind persons in the United States—35,645 totally blind and 29,118 partially blind. Of these 8,228 are colored (including Indians, Chinese and Japanese). A considerable majority of the remainder are foreign-born. In fact, the proportion of foreign-born whites between sixty and eighty years of age—the period in which blindness most frequently occurs—is nearly three times that of the native whites. Granulated lids, or trachoma, is a prolific source of blindness among the poorer Russians, Jews, Irish and Italians. Yet, in spite of this unfavorable distribution of our blind population, about 20 per cent. of the blind are engaged in definite remunerative occupations, and the figures show that there is actually a larger percentage of totally blind people gainfully employed in the United States than is found in the general population. This will probably astonish the general population. It ought also to encourage the brave men and women who conduct the 42 schools for the blind in this country, to whose untiring efforts the result is in so large a measure due. These 42 schools at present accommodate 4,385 boys and girls, practically all of whom will go out prepared to do something in the world, not to be a burden on anybody's charity. The adult blind, those who are stricken late in life, have much less chance to learn, though Massachusetts has employed teachers for several years to visit the adult blind of that state in their homes, instructing them in reading, writing, and to some extent in the manual arts. Many have become self-supporting as a result. A bill to establish similar work in New York State was vetoed by the Governor in 1904 on the ground that the State already did enough for its blind "dependents." The Governor seemed to disregard the fact that the law would eventually tend to lessen the number of dependents. Naturally, the chief

work will always be done with the children, but as that work grows in compass and efficiency, the instruction of the adult blind is bound to increase also, and the percentage of blind dependents in the country, in spite of unrestricted immigration, will probably grow steadily less.

The manual arts and music claim as occupations, perhaps, and quite naturally, a majority of the blind. Besides an organ and an orchestra composed of students, the Perkins Institution of Boston contains over 80 pianos, and as a result of the instruction there all the pianos in the Boston schools are tuned by blind musicians, who even make and repair the defective parts. Music is an art that depends not at all on the eye for its enjoyment and less than most on the eye for its creation. Most musicians can play their instruments with their eyes shut. Scores are easily printed for the blind in point, just as books are. It is hardly surprising, then, that the Perkins Institution orchestra has received high praise from the judicious or that the graduates of the New York Institution should pass the examinations of the American College of Musicians with credit. Last year, out of a class of eighteen, seven received honors and the rest passed with flying colors.

What is more remarkable is the achievement of Joseph Bartlett of Boston, a blind boy who entered Dartmouth College last fall not only without conditions but with honor marks; or of Miss Elizabeth G. Mills of Buffalo, a pupil of the New York State School for the Blind at Batavia, who by means of the shorthand machine has become a stenographer, passing the Regents' examination in both the 50 and 100-per-minute tests, and apparently opening up a new field of occupation for her class; or of George Mills, a graduate of the Perkins Institute, who is now a successful telegrapher, and has constructed a new induction coil. The stories of Laura Bridgman, Helen Keller, Tommy Stringer (now a pupil at the Perkins Institute), and other blind mutes have been so often told that everyone is familiar with them. This trebly unfortunate class, it is now well known, can be lifted by patient toil, out of physical and mental, and often spiritual darkness, into light. Indeed, Miss Keller was even lifted into Radcliffe College. And as a result of her college training in English composition she has given us the most vivid and cheerful picture in literature of what constitutes the world for her and those like her.

Cheerfulness, indeed, seems to be one of the fine results of blind education. There is a blind man's club in New York City now which numbers forty or fifty members, all of them engaged in self-supporting industry, chiefly the manufacture of parts of furniture. They meet every other Monday, to play cards, chess and checkers, tell stories, listen to music, and hear the news in their world. It is one of the most cheerful gatherings imaginable. One of their delights is to tell stories on themselves. The other day a member recalled the remark of a Boston woman who viewed with indignation a party of students from the Perkins Institution walking down the street of an evening. "The idea," she cried, of allowing them out alone in the street after dark." Another member, with a little touch of philosophy, told his fellows that he had been blind only seven months, but was already earning his own living again, and finding content. "You see," he said (they all use the verb "to see"), "it's hard for a blind man to be a bad man. All that's left for him is to be useful."

It is a long step from Milton's words:

"They also serve who only stand and wait,"

to this year of grace when they do not stand and wait, but get out and run. It is a step made possible, of course, by Dr. Howe and the other pioneers of

blind education. But the fact of blindness will never lose its pathos, at least not for those who can see. And the statistics of the causes of blindness will not cease to be a reproach until certain of them are vitally altered by the passage of laws and the education of ignorant parents and nurses. In the last annual report of Joseph H. Freeman, Superintendent of the Illinois Institution for the Education of the Blind, it is pointed out that one-third of the children in the schools for the blind could have been saved from their darkness if medical aid had been given them in time. The cause of their blindness was ophthalmia neonatorum—blindness of the new-born child. Mr. Freeman thinks it is not too much to say that in "nearly all of these cases the eyesight might have been saved by proper treatment at the commencement of the disease." So there are nearly 2,000 children in this country—and no one knows how many adults—doomed to perpetual darkness owing to a few hours' delay in summoning a physician.

Illinois has a law which should have a place in the statutes of every state in the Union. It provides that every nurse or midwife who discovers that a child has red and inflamed eyes within the first two weeks of its life shall report the fact to a health officer, or a qualified physician, within six hours. The penalty of disobedience of the law is a fine of not more than $100.00 or imprisonment for not more than six months, or both.

As in the case of tuberculosis and other diseases, then, the ounce of preventive is vastly important and the education of the sound is almost as vital as the care of the stricken. The world has been a long time learning to shut the stable door; each generation, in fact, especially when ignorant immigrants form so large a part of it, has to be taught anew. The battle must be kept up. But in the fight against blindness, and the evils of blindness, the standard is advancing year by year. Or, better, with the Kentucky eleven in mind, let us say that first down has been called with every rush.

Blind Editor's Death.

A despatch from Orangeville, Ontario, dated Sept. 10th, 1907, said: "Dennis Joseph Mungovan, editor and proprietor of the *Dufferin Post*, died here last evening at the family residence from a complication of diseases, aged about fifty. The deceased originally studied law, and came here with Mr. J. P. McMillar, first County Crown Attorney, about 1881, when the county was formed, but afterwards abandoned law for journalism. Mr. Mungovan was a fearless and vigorous writer, and was particularly effective in exposing what he considered frauds or chicanery of any kind. Several years ago deceased was afflicted with total blindness, and never recovered his sight. Notwithstanding this misfortune he kept well versed in the topics of the day, and it was a fact that he could instantly recognize almost every person he ever met on hearing the voice, and call such person by name, such was his extraordinary memory. Mr. Mungovan was twice married. Miss Foley, his first wife, a sister of Mr. John Foley, editor of the *Sun*, died some years ago. His second wife, formerly Miss Quinlevan, and several children survive. The remains will likely be interred at Stratford. The late Father Mungovan of St. Michael's College was a brother of deceased."

Robert Park's Graduation in Massage.

Since the compilation of the last annual report, the Toronto *Globe* published the following:—

"The annual meeting of the Orthopedic Hospital, held last night, was made exceptionally interesting by the fact that amongst those to whom were presented graduating diplomas and pins was a young man, Mr. Robert Park,

who has been blind for several years, and who was graduated in massage. He is said by medical men present to be the first blind person in Canada to graduate in such a branch of medical science. Mr. Park attended the Institution for the Blind at Brantford for some time, having lost his eyesight in early youth. He made rapid progress while there, and a year ago was taken into the hospital here to study massage. Through his own diligence and the care of Miss Plunkett-Campbell, teacher in that branch, he succeeded beyond expectation, and was last night given his diploma before a large gathering of persons. Dr. Mackenzie, senior surgeon of the hospital, spoke particularly of the success of the young man, and said that because of his blindness he was perhaps more perfected in his profession than people whose sense of feeling was not made the more acute by the loss of sight. The fact that he had graduated was worthy of comment in Canada. He will remain in Toronto. Rev. Dr. John Potts presided at the meeting."

The Eyes.

(By Anna M. Galbraith, M.D., in March Delineator.)

Of all the misfortunes that could befall a human being, the loss of sight is probably the greatest; and yet no organ of the body is so constantly abused as the eyes.

The eyeball is contained and protected in a conical cavity formed by the bones of the face and skull. It is further protected by the eyelids, the eyebrows and the eyelashes.

The opening between the lids is called the commissure; and on the width and breadth of this depends the size of the eye.

The lachrymal gland secretes the tears. It is situated at the upper and outer angle of the orbit. The tears are directed through a bony canal, called the nasal duct, into the nose.

The conjunctiva is a thin, transparent mucous membrane that lines the front of the eyeball and is reflected to the inner surface of the eyelids. It is continuous with the mucous membrane of the nose and mouth. Hence in inflammation of the nasal mucous membrane, as in an ordinary cold in the head, or influenza, the conjunctiva is liable to become congested.

The eyeball is spherical in form; the anterior transparent part is called the cornea. The iris is a circular contracting membrane, suspended from the edges of the cornea, in front of the eye like a curtain. The iris gives color to the eye, and when we say that an eye is blue or brown, we mean that is the color of the iris. The iris is freely movable, and according as to whether it dilates or contracts there is an alteration in the size of its central aperture called the pupil.

The chief function of the iris is to regulate the quantity of light admitted to the interior of the eye. In a very strong light the pupil quickly contracts, shutting out the excessive light, while in a subdued light, the pupil dilates, allowing more to enter.

The eye is a camera, consisting of a series of lenses and media arranged in a dark chamber, the iris serving as a curtain. The object of the apparatus is to form on the retina a distinct image of external objects.

In the normal or passive condition of the eye when it is adjusted for far objects, the anterior surface of the lens is somewhat flattened. Accommodation for near objects consists of a contraction of the circular ciliary muscle, and an increase in the convexity of the anterior surface of the crystalline lens.

The light enters the eyeball through the pupil, falls upon the retina, which has often been compared to the sensitive plate of a camera, is received, and transmitted by the optic nerve to the visual centres of the brain. The eyeball does not see, it is only a sensitive end organ which receives and transmits the impressions to the higher centre of sight. The act of vision is performed by the brain. The focusing power of the eye is the property of bending nearly parallel rays of light from distant and divergent rays or from close range so that they meet exactly on the sensitive retina; this is called refraction. In the normal eye these rays are focused exactly on the retina; the near limit of accommodation is about four to five inches, and the far limit may be put at an infinite distance.

Myopia, or near-sightedness, is one of the most common refractive defects of the eye. In this condition by means of the greater length of the eyeball or increased refractive changes of the media, rays of light from a distance are focused in front of the retina, producing an indistinct image.

The near point is brought much nearer, from two to two and a half inches, and the far limit is at a very short distance.

In reading, the myope is obliged to hold his book very close to the eyes in order to see. In doing so he strains his muscles of convergence, producing ocular congestion and compression of the eyeball.

The predisposing causes of myopia are heredity,—it is said that half the myopics are descended from near-sighted parents,—astigmatism if uncorrected, and the effort to see small objects or figures distinctly, which entails a strain on the eyes.

Myopic eyes are not injured by wearing suitable glasses; but, on the contrary, are often preserved from injurious pressure on the globe in the indulgence of the habit to nearly close the lids in order to see better, as is commonly done when glasses are not worn.

In hyperopia or far-sightedness this condition of the eyeball is too short, and the rays of light from a distance are focused behind the retina. Instead of being distinct, the image is blurred.

Presbyopia is a loss of the power of accommodation, by which reading, writing, sewing and other near work is accomplished. This power of accommodation is greatest in early life and gradually diminishes until about the age of forty years, when reading at the ordinary distance becomes uncomfortable. At about seventy-five years of age the power of accommodation is, in most cases, practically lost.

Every person over forty-five with normal or far-sighted eyes should wear glasses to perform near work.

Astigmatism does not depend on the length of the eyeball, but on the curvature of the cornea, and very rarely on that of the lens.

In simple astigmatism, in looking at the astigmatic chart (like the face of a clock with twenty-four radii) with each eye separately, certain lines in the defective meridian seem very much blurred, while those at exact right angles appear clear and black. This furnishes a test for astigmatism, since to the normal eye the lines appear of equal distinctness and clearness. Astigmatism is very common.

Comparatively few eyes are perfect. Far-sighted or astigmatic eyes can secure perfect vision by means of accommodation. By constant strain on the ciliary muscle, the crystalline lens is so increased in curvature as to exactly counterbalance the optical defect of those eyes.

Healthy eyes should do their work without the consciousness of their owner, and this is a safe test as to the kind and amount of work demanded of them.

A sense of fatigue in the eyes after reading for a short time is a local symptom of eye-strain, and this may be followed by a constant sense of discomfort in the eyes, which is increased on using them with a very severe pain in the back of the head, a sensitiveness to light, and an inflammation of the eyelids and of the conjunctiva. After reading a little while the type may blur, there may be a difficulty in following the lines, and finally the lines may run together.

Headache increased on reading or sewing is one of the most common reflex symptoms of eye-strain.

It is a well-known fact that no muscle in the body can endure continuous contraction except for a very short time. Yet all near work requires the contraction of the ciliary muscle, say for from eight to twelve hours daily. The result is eye-strain.

Persons whose work necessitates much ocular labor should vary their duties with intervals of rest. In continued reading or sewing, it is well to desist at short intervals and fix the gaze on some distant object and close the lids repeatedly.

The habit of wearing veils is responsible for some deterioration of vision, particularly if they are very thick or dotted. The best veil for the eyes is one with a single large mesh, either without dots, or the dots so far apart that none shall come over the eye.

Artificial Lighting.—The main sources of artificial lighting are kerosene, gas and electricity. The points to be considered are the quantity and quality of the light, its steadiness, the vitiation of the atmosphere by the products of combustion, and the expense. Also the proper arrangement of the light.

The kerosene lamp is the most extensively used. The principal objections are the heat, the trouble of filling and keeping clean, the danger of explosion or fire if upset, the odor and the great vitiation of the atmosphere; yet the modern lamp gives a brilliant light, and if properly shaded by a slightly bluish chimney, so as to absorb the excess of yellow rays, it is very satisfactory.

Illuminating gas as furnished in cities has a great excess of yellow rays which are very injurious. The vitiation of the atmosphere is very considerable. The Bunsen burner, heating a patented composition burner to incandescence, gives a white light resembling daylight. It is not so hot, does not consume so much gas, and so there is less vitiation of the atmosphere. It is intensely brilliant and must be shaded by ground glass or a proper shade.

Electricity gives the very best light. For individual use, sixteen candlepower is sufficient.

The shade should not be transparent and should have an inner reflecting surface. Transparent lamp shades, especially when patterned, are always bad, whatever their color, because the light is irritating to the eyes, and there is a different degree of illumination thrown upon the work.

The reader should be in an upright sitting position, with the back to the light, the light falling over the left shoulder, and the book nearly on a level with the eyes. The book should be held at a distance of about fourteen inches from the eyes. The light should be on a level with the head, or slightly above. In desk work a shade should always be worn to protect the eyes.

Reading in a recumbent position is a pernicious habit, and is particularly bad when convalescing from illness or when tired.

Reading in carriages or cars is injurious to all eyes, but particularly so to myopic eyes, because of the constant jolting, the distance between the type and the eyes is constantly varying, necessitating the frequent and

abrupt adjustment of accommodation. Besides this, the illumination is apt to be poor. Reading at twilight is also very bad for the eyes.

Sewing and embroidery require the most trying ocular labor and the best conditions for illumination. Working on black goods by artificial light should be positively forbidden.

In very hot weather the eyes should be always protected that the rays of the sun do not shine directly into them. This may be done by the brim of the hat or by the use of a parasol. At the seashore, on ocean voyages, or in intensely hot weather the eyes should be protected from the glare of the sun by the use of slightly tinted smoked glasses.

The most common injuries to the eyes are the entrance of small particles of dust, cinders, steel filings, etc., into the conjunctival sac, or into the substance of the cornea. Frequently with the aid of a little winking, the tears wash away these foreign substances, but if the substance lodges in the lining membrane of the upper or lower lid, or be imbedded in the cornea, it may be necessary to resort to other means in order to remove them.

The lining membrane of the lower lid is brought into view by simple tension of the lower lid downward by one finger. If the offending particle is not seen, the upper lid should be everted. This may be easily effected by the fingers alone. The patient is told to look down, the lashes and edge of the upper lid are seized by the thumb and forefinger of the right hand, and the lid is drawn at first forward and then downward away from the eye; then upward over the point of the thumb or forefinger of the left hand, which is held stationary on the lid and acts as a fulcum. The foreign body should be removed with a handerchief, but if it is imbedded, it may be necessary for a competent physician to release it.

Conjunctivitis.—The eyes are generally bloodshot and the lining membrane of the lids intensely red. There is a sensation of irritation, an intolerance of light, and a constant sense of discomfort, as though particles of sand were in the eyes. The eyes are heavy and tired after having been used for a short time.

The best treatment of acute conjunctivitis, which is often caused by the penetration of dust or other foreign bodies into the conjunctival sac, is generally applications of cold water. A folded handkerchief is wrung out of ice-water, and laid on the closed lids. It must be changed every few moments so that it shall not become warm. When the acute symptoms have begun to abate the patient will no longer find these applications grateful, and they must then be discontinued.

For chronic conjunctivitis hot applications are the best. For these one teaspoonful of fine table salt may be dissolved in a pint of hot water, or two teaspoonfuls of boracic acid to the pint of water; the last-named is a mild antiseptic. One tablespoonful of boracic acid may be put into a quart bottle nearly filled with water, and shaken well from time to time until there is a perfect solution.

The application should be made with a rather thick piece of absorbent cotton; bathe one eye and then the other. The absorbent cotton should be picked up with all the water it will hold, and be placed over the closed eye just as hot as can be comfortably borne, and held there until it begins to cool, when the procedure should be repeated. These hot fomentations should be kept up for ten minutes, and be repeated four times a day. If the eyes are very seriously inflamed, it is well to use separate pieces of cotton for each eye.

Trachoma, of which so much is heard now, is another name for granular conjunctivitis or granular lids. This affection is very contagious. The

affection comes on slowly, is frequently unaccompanied by redness or secretion to any appreciable degree in its early stages. Presence of secretion or interference with vision should always attract attention.

Strict precautions must be taken that the patient's handkerchief, towel, and wash-basin are not used by any other members of the family. Further, the other members of the family should bathe their eyes several times a day with a solution of boracic acid.

Styes are very painful species of small boils that form generally on the edges of the eyelids. They are apt to appear in succession. Certain persons are liable to them if the system is run down. Like boils in other parts of the system, they give evidence of impaired nutrition.

The hot fomentations of a boracic acid solution will sometimes abort them, if used early. If pus has formed, the stye must be well opened by an incision parallel to the edge of the lid. This should not be attempted by anyone but a physician.

Color-Blindness.—As a rule four per cent. of males and about one-half per cent. of females are color-blind. The part of the color sense that is most often deficient is that for green and red.

Cataract.—This is a disease in which the crystalline lens or its capsule, or both, lose their transparency and become opaque. Eventually total blindness is the result. Senile cataracts appear after the forty-eighth year.

Libraries.

The total enrolment of subscribers to the free circulating library is 180; the number of readers during the year ended September 30th was 57; new readers enrolled during the year 13; number of books issued during the year 288; total number of books issued since the library was established 1817.

Besides a few ink-type books for the teachers' library and for the evening readings, and the usual supply of school books, the following books in New York point print have been ordered from the American Printing House for the Blind, Louisville, Kentucky:

Collar & Daniell's Beginner's Latin Book, 2 vols.
Caesar's Commentaries (Latin).
Allen's Latin Dictionary, 3 vols.
Latin Literature, 2 vols.
Werner's Geography, 2 vols.
Steele's Popular Zoology.
Macaulay's Essay on Clive.
" " Warren Hastings.
" " Pilgrim's Progress.
" " Frederick the Great.
Motley's Peter the Great.
Macaulay's Samuel Johnson.
Autobiography of Benjamin Franklin.
Thackeray's Four Georges.
" English Humorists, 2 vols.
Boone and other Pioneers.
The Taming of the Shrew, Rolfe's Notes.
Macbeth, Rolfe's Notes.
King Lear, Rolfe's Notes.
Bryant's Thanatopsis.

Scott's Lady of the Lake.
Goldsmith's She Stoops to Conquer.
Select Poems.
Scott's Marmion.
Tennyson's In Memoriam.
Eggleston's Stories of American Life and Adventure.
Bayard Taylor's Boys of Other Countries.
Fancies of Child Life.
Roman Catholic Catechism.
Book of Common Prayer, 2 vols.
Helen Keller's Optimism.
Plato's A Day in Athens with Socrates.
Wait's System of Point Musical Notation.
J. C. Fillmore's History of Pianoforte Music.
Simpson's Notes on Tuning.

THE STAFF.

Minister of Education (in charge):

Hon. R. A. Pyne, M.D., LL.D.

Deputy Minister.

A. H. U. Colquhoun, B.A., LL.D.

Officers of the Institution:

H. F. Gardiner, M.A. ..... Principal.
W. B. Wickens ..... Assistant Principal.
W. N. Hossie ..... Bursar and Storekeeper.
J. A. Marquis, M.D. ..... Physician.
B. C. Bell, M.D. ..... Oculist.
Miss A. M. Rice ..... Matron.

Teachers:

W. B. Wickens ..... Literary.
P. J. Roney ..... Literary.
Miss C. Gillin ..... Literary.
Miss M. E. Walsh ..... Literary.
W. Norman Andrews ..... Music.
Miss E. Moore ..... Music.
Miss E. Harrington ..... Music.
Miss E. Lee ..... Kindergarten and Domestic Science.
Miss L. H. Haycock ..... Knitting and Crochet.
Miss M. Baird ..... Sewing and Netting.
Miss K. Burke ..... Assistant Knitting and Sewing.
T. S. Usher ..... Piano Tuning.
W. B. Donkin ..... Trades Instructor.
D. Green ..... Supervisor of Boys.
Miss M. J. Cronk ..... Visitors' Attendant.
Mrs. J. Kirk ..... Boys' Nurse.
Miss M. Stewart ..... Girls' Nurse.
J. B. Wilson ..... Engineer.
G. G. Lambden ..... Carpenter.
G. Grierson ..... Baker.
D. Willits ..... Farmer and Gardener.

Farm, Grounds and Buildings.

The products of the farm are not so abundant this year as usual, on account of the late, cold and wet spring, followed by a long spell of very dry weather. The crop of late potatoes is below the average; usually there is a surplus for sale after the demands of the Institution have been supplied. The oats were of good quality, but light in quantity, as was the case on all the farms in this neighborhood. Corn was a fair crop; the silo is full. Hay is above the average in quantity and quality. Turnips, mangolds, beets, parsnips and onions plentiful; garden vegetables, except tomatoes, a fair crop; citrons and squash abundant. Apples few and of poor quality.

Sixty-six spruce trees that were planted in the spring are doing well; some of the young elms have died; also some birch trees.

Considerable fencing was done about the farm and locked gates provided to deter trespassers (principally foreigners) who seemed to consider the products of the garden and orchard their own. The farm hands drew a quantity of earth for grading about the walks and kept the roadways in good condition.

A satisfactory addition was made to the cement walks, both on the grounds and on the adjoining street, the latter being laid by the city, but paid for by the Institution. The carpenter and one of the farm hands also relaid a portion of the plank walks. The width of the cement walk on Ava Road is five feet; the cement walks within the grounds are four and six feet wide. The steps leading to the west door of the main building were refaced in cement.

The old plank walk from main building to shop was relaid on new bearings: also the walk in front of the shop, the walk from kitchen to clothes lines, and a portion of the girls' walk.

The tower was repaired from base of vane to the organ flat, the vane base strengthened, vane painted, frames painted, decayed sills made good with new material, decayed sash repaired or replaced, defective brickwork around frames pointed and made good with cement mortar, tin work on tower renewed and new conductor piping provided, old sheeting at windows behind organ replaced, sash and frame work repaired and painted. The stairway in tower above the organ was closed in to prevent draft, and the interior of tower painted and kalsomined.

The outside woodwork of the eastern half of the main building, including the tower, was repainted; also the outside of the lodge (Engineer's residence) and the Bursar's verandah.

Turned posts were provided for the renewal of the gas-pipe fence next to St. Paul's Avenue and Ava Road. Pipe drains were laid to carry off surface water. New poles and wiring for the electric transformers were erected by the Company.

The old brick steam box at the end of the shop was replaced by one of cement, and a cement floor was put in place of the leaky lead floor under the washing machines in the laundry.

The floor of the workshop was repaired, the radiators raised, and a room on the second floor fitted up for hammock work. New cupboard and showcase provided for shop.

Plaster in main building repaired where necessary, and windows glazed. Woodwork in corridors painted or varnished, walls kalsomined. Bell hall, lavatories and several dormitories kalsomined.

Hardwood floor laid in laundry drying room, and in portion of the Music Hall. Partition removed and shelving provided in circulating library room, and metal ceiling provided. Floors of class-rooms and corridors oiled.

Additional Buildings.

Besides the improvement of the heating and ventilating system, referred to in preceding pages, additional buildings are required for the following purposes, which cannot be accomplished by any rearrangement of the present facilities: The officers, pupils and housemaids, who now sleep in rooms on the third floor, adjacent to the Music Hall, should be provided with quarters on the second floor, and the rooms they now occupy released for piano practice, etc. At the same time, sitting rooms should be provided for the girls, so that class rooms and dormitories need only be used for the purposes for which they were intended. Bureaus should be provided, and no trunks allowed in dormitories. Enough small bedrooms are needed to give one to each teacher or officer; now two teachers occupy one room. The girls should have a play room, similar in size to the boys' gymnasium and in corresponding location. Over it ample provision could be made for sleeping quarters for the cooks, laundresses and housemaids. Enlarged and suitable accommodation should be made for the classes in Domestic Science, and the Knitting and Sewing rooms should be in the same portion of the building. Proper Hospital accommodation should be provided on both sides of the house.

In the Report for 1879 is a description of the Institution Buildings, furnished by the Architect of the Public Works Department, containing this paragraph: "The wing erected in 1877 is 60 feet by 64 feet, and three stories in height, connected by passages, 14 feet by 10 feet and two stories in height, the style corresponding with the original building, and to complete the front it will be necessary to construct a similar wing on the girls' side."

To produce the proper architectural effect, this recommendation, made thirty years ago and frequently repeated, should be carried out, and it would cover all the requirements above enumerated except the gymnasium and help's dormitory, which would require a separate plain and inexpensive building in the rear of the new wing.

On the boys' side there will be a lack of shop accommodation, if the schemes contemplated for manual training and trades instruction are carried out. A plain new building of two or three stories could be made to accommodate the Institution carpenter and a class in sloyd on the ground floor, the piano tuning class on the second floor, and the third floor, if added, would make a good place for the storage of shop materials and completed work. The piano tuners now occupy the portion of the west wing of the main building designed for a hospital. With the carpenter and his belongings moved out of the present shop building, there would be ample room there for the trade instruction and for a printing office.

The brick work of the present buildings will require a considerable expenditure for repair and repointing.

Visitors.

During the session we had an average of about twenty-five visitors per day, principally non-residents of Brantford, but some of them accompanied by residents. When the Presbyterian Women's Missionary Convention was held in Brantford, during the second week of May, we had 150 visitors in

three days, and I have to express my gratification with the intelligent interest in the work of the school shown by the ladies of that body. A few visitors continue to come in vacation time, or on Saturdays and Sundays; some ask to be shown through the building at five or six o'clock in the evening, after all the classes have been dismissed for the day. But the percentage of visitors who appreciate the fact that the proper time to inspect a school is during school hours is happily increasing. They will be made welcome from 9 to 4 o'clock on Mondays, Tuesdays, Wednesdays, Thursdays and Fridays, but not on Saturdays or Sundays. While the parents and other relatives of pupils are at liberty to come at any time, it is proper to remind them that they cannot be lodged in the Institution.

H. F. Gardiner,
Principal.

Brantford, October, 1907.

Physician's Report.

Hon. R. A. Pyne, M.D., *Minister of Education for Ontario*:

Sir,—I beg to forward my Annual Report as Physician to the Ontario Institution for the Blind.

The pupils returned in September, 1906, in good physical condition, with very few exceptions.

During the session there were not many serious cases, although we had a full share of cases of influenza, bad colds, etc. In the latter part of January measles broke out in rather a severe form. There were twenty-five cases in all. The usual difficulty was experienced on the girls' side, in having insufficient and inadequate accommodation for such outbreaks.

One female pupil was sent home during the term after partially recovering from an attack of hemiplegia. Another pupil subject to epilepsy went home after our efforts failed to show progress.

The officers and employees as a whole enjoyed good health during the year.

During my leave of absence in the Old Country, for which privilege I again beg to thank you, my duties were taken by Dr. H. R. Frank of this city. He reports to me that the general health was good.

In closing my report I beg to again call your attention to the difficulties in properly ventilating sick rooms with the present system of heating and also to the insufficient accommodation on the girls' side of the house.

I have the honor to be,
Sir,
your obedient servant,

John A. Marquis.

Brantford, September 16th, 1907.

Oculist's Report.

To Hon. R. A. Pyne, M.D., LL.D., *Minister of Education*:

Sir,—I have the honor to report the results of the annual examination of the pupils' eyes.

	Males.	Females.	Total.
New pupils examined	15	12	27
Old pupils examined	20	27	47
			74

There were two new male pupils and four females absent at the time of examination.

Of the pupils I had examined on previous occasions there was the usual proportion showing some improvement in sight, as is found from year to year, resulting from their improved health and physical condition, brought about by the wholesome regularity of their Institution life and training.

A feature worth comment in the new pupils is the younger age of entrance, the average this year being:—

Males	13.5 years.
Females	10.7 years.

With the exception of one male and one female whom I reported ineligible, the sight of all of these is pretty bad, there being, in fact, a high proportion of absolutely blind eyes among them.

The pupils as a whole were remarkably free from acute inflammations of the eyes or ears, or exacerbations of their old eye troubles, my services being required on only a few occasions throughout the year.

Respectfully submitted,

B. C. Bell.

Brantford, July 1st, 1907.

Literary Examiner's Report.

Hon. R. A. Pyne, M.D.,

Minister of Education:

Sir,—In submitting the report of the examination of the literary classes in the Ontario Institution for the Education of the Blind, held from the eleventh of June to the fourteenth, inclusive, I may say that good work is being done and much success has rewarded the labors of the teachers and of the pupils.

The general appearance of the pupils is good, but the difference of home surroundings and of early training is clearly seen in the dress and deportment. The Government can scarcely be expected to keep the children in clothing, but some of the pupils are not sufficiently supplied. The girls are more careful of their appearance than the boys.

A useful addition has been made to the equipment of the Institution in a 50-yard race track, with heavy wire stretched on posts and furnished with looped wire guides with wooden handles, by holding which the pupils may run with perfect confidence. One of these 50-yard tracks is for the girls, and a similar one for the boys, and for the latter a 100-yard track also has been furnished.

In the school curriculum, the subject of physiology has been added to the course of study, and the three classes that pursue this subject seemed to be interested and passed a good examination, especially considering that it is a new subject.

The class in kindergarten reading is too large for effective work, considering the individual attention the pupils require.

In spelling, I would suggest that Miss Walsh's class and Miss Haycock's class be blended; the former, consisting of seven or eight, could be enlarged, or, if the two classes are united, the best of each could be taken to form a senior class and the rest would make a junior form. By this arrangement the best pupils at present in Miss Haycock's room would have a better opportunity for advancement.

In the reading classes, the books from constant handling become very soiled and somewhat torn, and many of the points blunted. If books made with aluminum instead of paper could be procured, they would be far more durable and could be kept clean by occasional washing, thus avoiding the unpleasant results of frequent thumbing of the pages.

The report of the examination of the various classes will be found in detail in the following:

Mr. Wickens' Classes.

Latin.—This class consists of eight girls and four boys, divided into seniors and juniors. The work to the end of the first conjugation has been well done. When we take into consideration the fact that the work must be dictated word by word for the pupils to write in point print, as no books adapted for the use of the blind are furnished, we must be satisfied with limited advancement. The marks assigned were from 70 per cent. to 100, with an average of 82.

Arithmetic.—In this class of 8 girls and 12 boys there was, as might be expected, a great variety of ability shown. The questions were mostly problems involving fractions and the answers on the whole were very creditable, one boy obtaining full marks; those of the class ranging from 15 per cent. to 100, averaging 62 per cent.

Geography.—The work taken up was the Continent of Europe, with a class of 10 girls and 8 boys, several of whom answered with great accuracy, while others were very poor, the marks assigned varying from nothing to 100, with an average of 69.

Physiology.—Work: framework of the human body, digestion, circulation, respiration. The class of 12 girls and 9 boys answered well, four obtaining full marks, while one got 0 and five reached 25 per cent., the average of all being 63 per cent.

Reading.—The senior class is composed of 5 girls and 2 boys, who read "Enoch Arden" in point print; the juniors, 2 girls and 1 boy, read from the Second Point Print Readers. The marks assigned were from 50 to 90 per cent., with an average of 70.

Scripture History and Geography.—In this subject we have a class of 28 boys studying "Two Years of Christ's Ministry." The answers were good, the marks from 0 to 100 per cent., with an average of 84, showing that the ground was well covered.

Spelling.—There are 33 pupils, all boys, in this subject, in three divisions. The seniors, 12 in number, have Gage's Speller, first six parts; the second division, 10 in number, with the first five parts of the same book, and 11 juniors. The marks of the seniors were from 25 to 100 per cent., with an average of 82: the middle division from 25 to 100, average 83; and the juniors 25 to 100, average 77, making the average for the whole class 81 per cent. This is a satisfactory rating in an important subject.

Mr. Roney's Classes.

Arithmetic.—In this junior class we find 5 girls and 16 boys doing good work in addition, subtraction, multiplication up to 12 times 20 and problems. Most of the class are promising students. The marks, from 15 per cent. to 100, with an average of 74 per cent., show fairly well, the relative standing of the boys being far superior to the girls.

English Grammar.—Limits: the parts of speech, phrases, parsing and analysis of simple sentences. This junior class comprises 4 girls and 16 boys. The marks assigned were from 50 per cent. to 100, with an average of 81, five boys obtaining full marks.

Geography.—A class of 7 girls and 12 boys had for their work the map of the Dominion of Canada and book work as outlined in the Public School Geography of the Dominion; and for juniors the answers were very creditable, earning marks from 50 per cent. to 100, averaging 81 per cent.

Physiology.—Digestion, respiration, circulation of the blood. The pupils in this class are the same as in Geography, and they obtained marks varying from 0 to 100 per cent., averaging 74 per cent.

Reading.—Primer and Books I. and II. The class consists of 5 girls and 16 boys just above the kindergarten. The pupils showed great variety of proficiency and already some are good readers, the marks ranging from 40 per cent. to 85, with an average of 60.

Writing.—This is the senior class, consisting of 7 girls and 18 boys, 23 of whom submitted samples of pencil writing of sentences assigned by the examiner. The work of some was excellent, as the high marks indicate. The pupils obtained from 30 per cent. to 95, with an average of 74.

Miss Walsh's Classes.

Arithmetic.—This senior class of 9 girls and 7 boys with three or four exceptions displayed considerable ability in solving the problems given in fractions, interest, sharing, measurement of rooms for carpeting, and similar questions. The marks assigned were from 0 to 100 per cent., with an average of 67, no less than five pupils obtaining full marks.

Grammar.—The work in this class embraces definitions, inflections of nouns and of verbs, analysis of simple sentences. The answers to the questions were good, several pupils taking full marks. The percentage ranged from 34 to 100, averaging 86

Geography.—This is a large class of juniors, 26 being present, 13 girls and 13 boys. The work studied was the map of Ontario, with counties and cities and railways, etc., Provinces of Dominion with capitals, products of Ontario. The dissected map proves an excellent means of imparting instruction both in general and particular. The marks were from 0 to 100 per cent., with an average of 78.

Reading.—Second, Third and Fourth Readers, making three divisions in the class of 8 girls and 7 boys. The marks varied from 30 to 100 per cent., an average of 71 per cent.

Writing.—In this junior class most of the pupils write small letters, but some try capitals. They write words also and some have become quite proficient, as the marks, from 25 to 90 per cent., indicate, with an average of 53. There are 9 girls and 5 boys in this class.

Bible History.—St. John's Gospel, chapters vii. to xiii., with a review of previous chapters. This class is composed of 16 Roman Catholic children, 8 girls and 8 boys. The marks ranged from 10 to 100 per cent., averaging 78.

Spelling.—This is a small class of Roman Catholic children, 5 girls and 2 boys being present. The work is found in the first forty-two pages of the Practical Speller. The marks were from 40 to 100 per cent., with an average of 90.

Object Lessons.—In this class of 12 girls and 19 boys a very pleasant and interesting half-hour was spent, as the pupils described different animals presented to them, such as the turtle, monkey, kangaroo, crow, blackbird, rat, woodchuck, toad, and others. The class seems interested in the work, and while instruction is imparted in Natural History, yet the pupil is at the same time extending his knowledge in spelling and in the use of a wide range of words.

Miss Gillin's Classes.

Arithmetic.—Multiplication table to 20 times 20, simple rules with problems in weights and measures. There were 7 girls and 5 boys and the class bore evidence of good work, the marks being from 36 to 86 per cent., with an average of 74.

Grammar.—History of the English language, analysis and parsing. This senior class of 7 girls and 6 boys passed a very creditable examination, ranging in marks from 50 to 100 per cent., an average of 81.

Geography.—This is a small intermediate class of 5 girls and 5 boys, who have studied for this year the United States and South America, and have covered the work very well. The marks given were from 59 per cent. to 100, averaging 85.

Physiology.—This class of 5 girls and 6 boys have studied the first five chapters of the Public School Physiology. With the exception of three, the pupils took very high marks, the rating being from 25 per cent. to 100, averaging 84.

Writing.—The work consists of letters and simple sentences. The marks ranged from 10 to 100, with an average of 46 per cent. in a class of 6 girls and 13 boys, one of the latter obtaining full marks.

English History.—This class of 15 girls and 12 boys shows good training in the year's work, "History of Our Own Times," chapters xxxii. to liii., and a sketch of the great Boer War, the marks being from 0 to 100 per cent., with an average of 79, the average being considerably lowered by the poor marks of two or three of the pupils.

Canadian History.—Sketch of French rule; sketch of English rule. This class is composed of the same pupils as the class in English History. The marks assigned were from 32 per cent. to 100, with an average of 84.

Bible Geography and History.—Life of Christ. The class consists of 15 girls, no boys. With one exception the marks were very high, ranging from 17 per cent. to 100, with an average of 89.

Spelling.—Gage's Practical Speller, pages 11 to 65. In a class of 16 girls, 7 obtained full marks, the range being from 17 to 100 per cent., an average of 75.

English Literature.—Victorian Era, Primer by S. Brooke; Shakespeare's Henry VIII. This is one of the best classes in the Institution and would do credit to any school. There are 11 girls and 7 boys. The examination in the play, Henry VIII., was very interesting, and the answers showed careful training and diligent study. The marks were from 38 per cent. to 100, with an average of 86.

Composition.—There were 18 pupils whose work was examined in point of subject matter and handwriting. These compositions were written at

different times during the year. The samples submitted showed that the pupils were persevering and diligent. In some cases the writing was poor and the subject matter good; in others the writing was good as well as the composition itself. Of the typewritten samples submitted, only two were poor, some being excellent.

Miss Lee's Classes.

Arithmetic.—Addition, subtraction, multiplication table to 5 times, simple examples. This beginners' class of 10 girls and 8 boys answers the questions very well. Some of the pupils have been two years or more in the class, and they, in most cases, are superior to the others. The marks were from 17 per cent. to 100, with an average of 88.

Reading.—Alphabet cards (embossed), Phonetic Primer. A class of 11 girls and 9 boys of varying ages and attainments. Some have made marked advancement since my last report, one little lad in particular with a partially paralyzed arm, who is physically much stronger and whose work is progressing in consequence; but, on the other hand, one boy is afflicted with some nervous trouble and has retrograded. The marks assigned varied from 10 per cent. to 100, with an average of 79.

Bible Geography and History.—The work taken up is Story of David, names of books in the Bible classified, Ten Commandments, Beatitudes, Apostles' Creed, Lord's Prayer, Psalms I., XIX., XXIII., XCI., CXVII. This class of young children, 8 girls and 7 boys, passed a good examination, considering the tender ages of the little ones. They obtained marks 75 per cent. to 100, with an average of 93.

Spelling.—Limits: Steps in phonic system, words of two and three letters, classified words of familiar objects, animals, numbers, months and days. The work, though very limited, has been mastered and the class of ten girls and nine boys obtained perfect marks in the examination.

Kindergarten.—Nineteen pupils, 10 girls and 9 boys, looked like a large family at play, but really combining with their play most useful work. Some were engaged in making one article, others gave their attention to others, but all were busy with sewing, weaving, paper-folding, bead-stringing, raffia, clay-modelling and similar things, all of a useful character. To vary the programme, some of the little ones recited short stories and the class joined heartily in singing, and it was worthy of note that most of the children had musical voices.

Miss Haycock's Classes.

Bible Geography and History.—Limits: Joshua, Psalm CV. The pupils showed that they were carefully trained, the marks being large—63 per cent. to 100, with an average of 95 in a class of 14 girls.

Spelling.—Gage's Practical Speller, sections 1 to 40; 56 to 60; words not over six letters. In this class of 14 girls the good scholars are kept back by the poor ones, and by this means the members of the class are kept together; otherwise some would be left far behind and probably become discouraged. Consequently the work, though very limited, has been well done, the marks ranging from 75 per cent. to 100, with an average of 90.

Knitting and Crocheting.—The work does not strictly come within the scope of a literary examiner's duties, yet it gives me pleasure to report on the excellent results gained by the girls under the direction of Miss Haycock, assisted by Miss Burke, as follows: 8 golf coats, slippers of various

kinds, 20 pairs bedroom boots, 31 pairs of mittens, 10 pairs of bootees, 12 chest protectors, baby bonnets, socks, stockings, 7 fancy toilet mats, 2 sets of table mats in fine cotton. The knowledge acquired in these classes must prove of great value in after life.

Miscellaneous.

Instruction in sewing is given by Miss Loveys, assisted by Miss Burke, and several samples of work were of a high order in both plain and fancy sewing. The process of threading the needle (by a blind person) is very simple, but like many useful inventions, seems simple only after you have been told the method. Too much importance cannot be attached to this class.

In Bead Work instruction is given to a class of 16 boys by Miss Cronk, and Miss Alice Hepburn, a pupil teacher, instructs a class of 23 girls. Many samples of the work showed great skill and taste.

Physical Culture classes are under the direction of Mr. Roney and Mr. Atkins, the former being the instructor of the girls and the latter of the boys. Owing to the inclemency of the weather and to the fact that Mr. Atkins has been installed in office only a short time, inspection of the boys was dispensed with, but Mr. Roney took a class of 16 girls in the gymnasium in marching and dumb-bell exercises. The movements were fairly well executed.

Willow Work, etc.—Under the capable direction of Mr. Lambden about 40 boys are instructed in willow-peeling and willow-cutting; 25 in cane chair-seating, and 16 in the making of horse-nets and hammocks. Many samples of cane-seating were shown which were as well done as could be possible in any factory. Over 50 hammocks and horse-nets have been made this year, of which a few fine specimens were left, the most of them having been sold. The workshop was kept in a clean and tidy manner.

All of which is respectfully submitted.

S. F. Passmore,

Examiner.

Brantford, July 15th, 1907.

Report on Musical Instruction.

Hon. R. A. Pyne, M.D.,

Minister of Education:

Sir,—I beg to submit my report on the musical instruction given at the Ontario Institution for the Blind, Brantford.

The examination was held on June 3rd and 4th, 1907, and conducted under the heads of Piano, Organ, Singing (solo singing and choral class), and Theory of Music (including harmony, counterpoint, and musical history). The work of the class in piano tuning was also heard. Forty-eight pupils are studying music, of whom forty-six take the piano, ten the organ, ten one or more branches of musical theory, and two solo singing. The choral class numbers thirty-five voices, and the number of pupils at various stages in the tuning course is twenty, of whom all but two are piano students.

Mr. E. A. Humphries, who has been the musical director for several years past, resigned a few months ago. The direction of music instruction has been continued by Mr. W. Norman Andrews, of the Brantford Conservatory of Music, who took up Mr. Humphries' work and carried it on with much vigor through the rest of the year.

The piano pupils are in charge of Miss Harrington and Miss Moore, who teach the primary and intermediate grades, and Mr. Andrews, who instructs the senior students. In the first or lowest grade, there are twenty-two pupils, divided into classes A, B, and C. In class A (the beginners) there are seven pupils; three show the greatest promise, two are fair, and two are slower. In class B are eight pupils; three of them are good, four fair, and one is slow. Of the seven pupils in class C, two are good, three are fair, and two are slow. Most of the pupils in grade I. have a good touch, and their foundation work is being well laid by the two teachers above mentioned.

In grade II. there are eleven pupils; four in class A, three in class B, and four in class C. One of the pupils in class A is promising, two are fair, and the other one is slow. All of the pupils in class B are good and promise well; one of them possesses the rare gift of absolute pitch. The four pupils in class C do fair work.

In the third grade there are eight pupils. Of the two pupils in class A, one plays fairly well, the other has a hard touch. The single pupil in class B is fair. Three of the four pupils in lass C do very good work, two of them being especially good; the other one is fair.

The five pupils in grade IV. (there are no students in grade V. this year) are all doing good, conscientious work. Two of them may be singled out as playing with brilliancy and refinement of style, and from whom good results should be expected next year.

Although there are no graduates this year, it is fair to suppose that there will be a class of graduates in the next year or so stronger than there has been for the last two or three years. In the piano department of the O. I. B. one must admire the thorough and conscientious teaching, especially of the junior pupils; and the music used throughout the course is all by standard composers.

The pupils in the organ class number ten, divided into grades II. and III. Of the five junior pupils in grade II., two have more than average ability, and should become good players; the other three do only fair work. Two of the five pupils in the third grade must be singled out as doing excellent work; they play really well, and gave good performances of compositions by Bach, Mendelssohn, Guilmant and other writers for the organ. Of the two pupils in this grade, one is playing fairly well; the other two, probably because of neglect of good organ music, have acquired a faulty style.

The pupils in Musical Theory (who are under the charge of Miss Moore) are divided into two classes, junior and senior; and the junior pupils are subdivided into classes A and B. The two pupils in class A wrote papers on Harmony and History, and obtained respectively 92.78 and 77.17 per cent. of the marks; the three pupils in class B obtained 82.66, 90.65 and 73.74 per cent. on the same subjects. Of the five pupils in the senior class one has this year passed the second theory examination of the Toronto College of Music, obtaining first-class honors in Harmony and Counterpoint and honors in History and Practical Harmony. Two of the other pupils in this class have passed the first theory examination of the College, obtaining respectively first-class honors in Harmony (written and practical)

and History, and honors in Written Harmony, pass in Practical Harmony, and first-class honors in History. Of the remaining two, both received 90 per cent. and over in Harmony, 60 and 73 per cent. respectively in Counterpoint, and 80 and 86 per cent. in History. On the whole this is a most excellent showing and proves the thoroughness of the theoretical teaching at the O. I. B.

Two of the male pupils were examined in singing; they were heard by me last year, but gave no evidence then of having had any training. Both of these students have good natural voices, which they have been cultivating during the past year to some purpose, for I found their singing greatly improved. Some of the women students should be encouraged to take up solo singing.

The choral singing by a class of thirty-five was, as in former years, remarkable for the spirit and enthusiasm with which the singers infused their task. The choir is better balanced this year and consequently more effective. Very creditable renderings were given of part songs by Hatton, Leslie and Caldicott.

Mr. Usher, the teacher in the tuning department, has a class of twenty. The tunings examined, of pupils in all stages of the course, were found to be very satisfactory. All except two of the pupils in the tuning class are studying the piano; this is an advantage, as the ability to play, even if only a little, must enhance the value of the tuner's work.

To sum up, the musical education imparted to the pupils of the Ontario Institution for the Blind seems to maintain a steady level of excellence from year to year; the teachers are doing well by their pupils and are entitled to much credit for the work they accomplish, and the pupils are acquiring that which will not only give them, in some cases, the means of earning a living when they leave the school, but will always be a source of pleasure and delight to them.

I have the honor to be,
Sir,
Your obedient servant,

W. E. Fairclough.

Toronto, August 29th, 1907.

ONTARIO INSTITUTION FOR THE BLIND.

STATISTICS FOR THE YEAR ENDING 30TH SEPTEMBER, 1907.

I. Attendance.

	Male.	Female.	Total.
Attendance for portion of year ending 30th September, 1872..	20	14	34
" for year ending 30th September, 1873.....	44	24	68
" " " 1874	66	46	112
" " " 1875.....	89	50	139
" " " 1876.....	84	64	148
" " " 1877.....	76	72	148
" " " 1878.....	91	84	175
" " " 1879.....	100	100	200
" " " 1880.....	105	93	198
" " " 1881.....	103	98	201
" " " 1882.....	94	73	167
" " " 1883.....	88	72	160
" " " 1884.....	71	69	140
" " " 1885.....	86	74	160
" " " 1886.....	93	71	164
" " " 1887.....	93	62	155
" " " 1888.....	94	62	156
" " " 1889.....	99	58	167
" " " 1890.....	95	69	164
" " " 1891.....	91	67	158
" " " 1892.....	85	70	155
" " " 1893.....	90	64	154
" " " 1894.....	84	66	150
" " " 1895.....	82	68	150
" " " 1896.....	72	69	141
" " " 1897.....	76	73	149
" " " 1898.....	74	73	147
" " " 1899.....	77	71	148
" " " 1900.....	77	67	144
" " " 1901.....	72	66	138
" " " 1902..	68	70	138
" " " 1903.....	67	64	131
" " " 1904.....	68	66	134
" " " 1905.....	67	74	141
" " " 1906.....	71	76	147
" " " 1907.....	72	72	144

II. Age of pupils.

	No.		No.
Six years.....	3	Seventeen years.....	8
Seven "	3	Eighteen "	2
Eight "	5	Nineteen "	8
Nine "	7	Twenty "	8
Ten "	8	Twenty-one "	4
Eleven "	11	Twenty-two "	6
Twelve "	10	Twenty-three "	1
Thirteen "	11	Twenty-four "	4
Fourteen "	11	Twenty-five "	2
Fifteen "	11	Over twenty-five years..	8
Sixteen "	13		
		Total.....	144

III.—Nationality of parents.

	No.		No.
American	2	Hungarian	1
Canadian	76	Norwegian	1
English	32	Russian	1
Irish	10	Scotch	14
Italian	1	Unknown	2
Galician	1		
German	3	Total	144

IV.—Denomination of parents.

	No.		No.
Christian Science	1	Roman Catholic	26
Congregational	2	Salvationist	2
Baptist	6	Lutheran	3
Disciples	1	Jewish	1
Episcopalian	42	Greek Catholic	1
Methodist	32	Unknown	1
Evangelical Association	1		
Presbyterian	25	Total	144

V.—Occupation of parents.

	No.		No.
Agent	1	Lawyer	1
Bar-tender	1	Manufacturer	1
Barbers	2	Machinist	1
Bricklayers	2	Marble Dealer	1
Blacksmiths	2	Merchants	5
Butcher	..	Military	1
Chief of Police	1	Millwright	1
Carter	1	Miner	1
Captain	1	Painters	2
Carpenters	3	Printer	1
Clerk	1	Polisher	1
Civil engineer	1	Plasterers	2
Contractor	2	Physician	1
Cooper	1	Plumber	1
Cook	1	Policeman	1
Carriage-builder	1	Sailor	1
Conductors	..	Shoemakers	2
Cabinetmaker	1	Railway employees	2
Drover	1	Repairer	1
Electrician	1	Tanner	1
Engineer	1	Tailors	3
Farmers	37	Travellers	2
Firemen	2	Teamsters	4
Foreman	..	Tinsmiths	2
Gardeners	3	Weaver	1
Government officers	1	Warehouseman	1
Grocer	..	Unknown	5
Hostler	1		
Hotel-keepers	2	Total	144
Laborers	27		

VI.—Cities and counties from which pupils were received during the official year ending 30th September, 1907.

County or city.	Male.	Female.	Total.	County or city.	Male.	Female.	Total.
District of Algoma	4	2	6	District of Nipissing	3	3	6
City of Belleville	....	....	....	County of Norfolk	....	2	2
County of Brant	1	...	1	" Northumberland	1	1	2
City of Brantford	2	1	3	" Ontario	....	....	.....
County of Bruce	1	2	3	City of Ottawa	3	3	6
" Carleton	....	1	1	County of Oxford	1	3	4
" Dufferin	1	....	1	" Peel	1	....	1
" Dundas	....	....	....	" Perth	1	2	3
" Durham	1	....	1	" Peterborough	...	3	3
" Elgin	1	1	2	" Prince Edward	....	....	.....
" Essex	1	2	3	" Prescott	2	....	2
" Frontenac	....	....	....	" Renfrew	....	....	.....
" Glengarry	1	1	2	" Russell	1	2	3
" Grenville	....	1	1	City of St. Catharines	....	....	.....
" Grey	....	1	1	" St. Thomas	....	....	.....
City of Guelph	1	1	2	" Stratford	1	1	2
County of Haldimand	....	....	....	County of Simcoe	1	1	2
" Haliburton	....	....	....	" Stormont	....	....	.....
" Halton	1	....	1	City of Toronto	12	14	26
City of Hamilton	1	2	3	County of Victoria	2	....	2
County of Hastings	....	....	....	" Waterloo	3	1	4
" Huron	3	1	4	" Welland	....	1	1
City of Kingston	1	....	1	" Wellington	....	1	1
County of Kent	1	...	1	" Wentworth	2	2	4
" Lambton	5	2	7	" York	1	1	2
" Leeds	3	....	3	*Saskatchewan	2	4	6
" Lanark	1	1	2	*Alberta,	1	1	2
" Lennox	....	....	....	*Manitoba	2	2	4
" Lincoln	....	....	....	*British Columbia	1	....	1
City of London	1	1	2	District of Parry Sound	....	....	.....
County of Middlesex	....	4	4				
District of Muskoka	....	....	....	Total.	72	72	144

*On Payments.

VII.—Cities and counties from which pupils were received from the opening of the Institution till 30th September, 1907.

County or city.	Male.	Female.	Total.	County or city.	Male.	Female.	Total.
District of Algoma	7	4	11	County of Haldimand	4	5	9
City of Belleville	3	1	4	" Halton	7	3	10
County of Brant	9	7	16	City of Hamilton	14	19	33
City of Brantford	16	10	26	County of Hastings	5	5	10
County of Bruce	9	11	20	" Huron	13	10	23
" Carleton	2	2	4	City of Kingston	7	4	11
" Dufferin	2	1	3	County of Kent	10	6	16
" Dundas	3	3	6	" Lambton	19	7	26
" Durham	4	4	8	" Leeds	14	4	18
" Elgin	7	6	13	" Lanark	3	4	7
" Essex	12	20	32	" Lennox	4	1	5
" Frontenac	5	2	7	" Lincoln	3	3	6
" Glengarry	8	1	9	City of London	11	10	21
" Grenville	2	2	4	District of Nipissing	7	4	11
" Grey	9	12	21	County of Middlesex	9	13	22
City of Guelph	4	3	7	District of Muskoka	3	....	3

VII.—Cities and counties from which pupils were received from the opening of the Institution till 30th September, 1907.—*Continued.*

County or city.	Male.	Female.	Total.	County or city.	Male.	Female.	Total.
County of Norfolk	10	9	19	City of Toronto	62	45	107
" Northumberland	5	9	14	County of Victoria	8	2	10
" Ontario	7	9	16	" Waterloo	12	5	17
City of Ottawa	17	3	20	" Welland	6	4	10
County of Oxford	7	11	18	" Wellington	10	8	18
" Peel	2	1	3	" Wentworth	10	10	20
" Perth	5	10	15	" York	18	16	34
" Peterborough	13	5	18	*Province of Quebec	4	1	5
" Prince Edward	6	2	8	*Saskatchewan	3	5	8
" Prescott	4	....	4	*United States	1	....	1
" Renfrew	8	6	14	*British Columbia	2	....	2
" Russell	4	3	7	*Manitoba	3	2	5
City of St. Catharines	2	1	3	District of Parry Sound	1	....	1
" St. Thomas	3	2	5	*Alberta	1	1	2
" Stratford	3	1	4				
County of Simcoe	11	11	22	Total	488	371	859
" Stormont	5	....	5				

*On Payment.

VIII.—Cities and counties from which pupils were received who were in residence on 30th September, 1907.

County or city.	Male.	Female.	Total.	County or city.	Male.	Female.	Total.
District of Algoma	3	1	4	County of Norfolk	....	1	1
City of Belleville	....	....	....	" Northumberland	1	1	2
County of Brant	1	....	1	" Ontario	....	....	....
City of Brantford	1	1	2	City of Ottawa	3	3	6
County of Bruce	1	2	3	County of Oxford	1	2	3
" Carleton	....	1	1	" Peel	....	....	....
" Dufferin	1	....	1	" Perth	1	....	1
" Dundas	....	....	....	" Peterborough	....	2	2
" Durham	1	....	1	" Prince Edward	....	....	....
" Elgin	1	1	2	" Prescott	2	....	2
" Essex	1	1	2	" Renfrew	....	....	....
" Frontenac	....	....	....	" Russell	1	2	3
" Glengarry	1	1	2	City of St. Catharines	....	....	....
" Grenville	....	1	1	" St. Thomas	....	....	....
" Grey	....	1	1	" Stratford	1	1	2
City of Guelph	1	1	2	County of Simcoe	1	1	2
County of Haldimand	....	....	....	" Stormont	....	....	....
" Haliburton	....	....	....	City of Toronto	11	10	21
" Halton	....	....	....	County of Victoria	2	....	2
City of Hamilton	....	1	1	" Waterloo	1	....	1
County of Hastings	....	....	....	" Welland	....	1	1
" Huron	3	1	4	" Wellington	....	....	....
City of Kingston	1	....	1	" Wentworth	2	2	4
County of Kent	1	....	1	" York	1	1	2
" Lambton	3	2	5	British Columbia	1	....	1
" Leeds	3	....	3	Quebec	....	....	....
" Lanark	1	....	1	Manitoba	2	2	4
" Lennox	....	....	....	District of Parry Sound	....	....	....
" Lincoln	....	....	....	" Rainy River	....	....	....
City of London	....	....	....	Saskatchewan	2	3	5
" Woodstock	1	1	2	Alberta	1	....	1
County of Middlesex	....	2	2	City of Woodstock	....	1	1
District of Muskoka	....	....	....				
" Nipissing	2	1	3	Total	61	51	112

Ontario Institution for the Education of the Blind, Brantford, Ontario, Canada. Maintenance Expenditures for the year ending 30th September, 1907, compared with preceding year.

Item.	Service.	30th September, 1906. Average number, 110.			30th September, 1907. Average number, 111.		
		Total Expenditure, 1906.	Yearly cost average 110.	Weekly cost average 110.	Total Expenditure, 1907.	Yearly cost average 111.	Weekly cost average 111.
		$ c.	$ c.	c. mls	$ c.	$ c.	c. mls
1	Medicines, Medical Comforts....	64 58	58	1.1	87 80	78	1.5
2	Butcher's Meat, Fish and Fowls..	1,594 89	14 49	27.7	1,611 34	14 51	27.7
3	Flour, Bread and Biscuits	413 60	3 76	7.2	418 71	3 77	7.2
4	Butter and Lard.....	1,144 41	10 40	20.	1,252 40	11 28	21.6
5	General Groceries.....	1,067 98	9 70	18.6	1,040 62	9 37	18.
6	Fruit and Vegetables.....	224 67	2 04	3.9	211 05	1 90	3.9
7	Bedding, Clothing and Shoes....	437 60	3 97	7.6	394 62	3 55	6.8
8	Fuel—Wood, Coal and Gas.....	3,176 73	28 88	55.5	3,758 23	33 85	65.1
9	Light—Electric and Gas	745 74	6 78	13.	950 49	8 56	16.4
10	Laundry, Soap and Cleaning	231 84	2 10	4.	230 98	2 08	4.
11	Furniture and Furnishings	529 29	4 81	9.2	463 58	4 17	8.
12	Farm and Garden — Feed and Fodder	781 73	7 10	13.6	655 18	5 90	9.4
13	Repairs and Alterations	821 48	7 46	14.3	1,105 38	9 90	19.
14	Advertising, Printing, Stationery, etc.....	427 09	3 88	7.4	526 13	4 74	9.
15	Books, Apparatus and Appliances.	865 14	7 86	15.1	782 04	7 04	13.5
16	Miscellaneous, unenumerated....	1,170 64	10 64	20.4	981 93	8 84	17.
17	Pupils' Sittings at Church.....	200 00	1 81	3.4	200 00	1 80	3.5
18	Rent of Hydrants.....	160 00	1 45	2.8	160 00	1 44	2.6
19	Water Supply	277 75	2 52	4.8	301 42	2 71	5.5
20	Salaries and Wages.....	18,018 58	163 80	315.	18,248 63	164 40	316.1
21	Repairs to Buildings, Furniture, etc.....	376 73	3 42	6.5	1,236 68	11 14	21.4
		32,700 47	297 27	571.6	34,617 21	311 86	599.7

30th September, 1907.

Certified Correct, W. N. Hossie,
Bursar.

Raising the Flag.

APPENDIX L.—REPORT OF THE SUPERINTENDENT OF THE ONTARIO INSTITUTION FOR THE DEAF AND DUMB, BELLEVILLE.

Minister of the Government in Charge:
Hon. Dr. R. A. Pyne.

Officers of the Institution:

C. B. Coughlin, M.D.	Superintendent.
Wm. Cochrane	Bursar.
W. W. Boyce, M.D	Physician.
Miss M. Ross	Matron.

Teachers:

Manual:

D. R. Coleman M.A. (Head Teacher.)
J. C. Balis, B.A.
W. J. Campbell.
Geo. F. Stewart.
H. L. Ingram.
Mrs. J. G. Terrill.
Mrs. J. C. Balis.
Miss M. Bull.

Manual:

Miss Ada James.
" S. Templeton.
" G. Linn.

Oral;

T. Rodwell.
Miss A. Hammond.
" A. Burke.

Teachers of Articulation:
Miss Agnes A. Gibson. Miss Florence Cross.

Teacher of Fancy Work:
Miss Mary Bull.

Teacher of Manual Training:
T. Rodwell.

Teacher of Domestic Science:
Miss Hattie Gowsell.

Miss A. G. Chisholm	Stenographer and Clerk.
Wm. Nurse	Storekeeper and Asst. Supervisor.
W. S. Minns	Supervisor of Boys.
Miss M. Dempsey	Seamstress, Supervisor of girls, etc.
Miss F. E. Bates	Trained Nurse and Instructor in Home Nursing.
J. T. Burns	Instructor in Printing.
Alex. Morrice	" Shoemaking.
J. Boyd	" Baking.
John Dowrie	" Carpentering.
C. J. Peppin	Engineer.
H. Nugent	Farmer and Instructor in Farming.

Belleville, 30th September, 1907.

Hon. R. A. Pyne, LL.D., M.D.
Minister of Education, Toronto, Ont.

Sir,—In presenting to you my first Report, the thirty-seventh in the history of the Institution, it is pleasing to state that satisfactory progress has been made in all departments of our work.

The number of pupils in attendance at the Institution this year is considerably larger than that of last year. The average number of pupils present during the year just closed was 228, that of the previous year 214. The average attendance for the current session, according to the present enrollment, will be at least 250, an increase of 22 over that of last year.

During the past session the general health of the pupils was excellent. As was to be expected with such a large number, a few of the pupils suffered from some of the minor complaints to which children are liable, but there were no deaths and no cases of serious illness, and often for weeks at a time every pupil was well enough to be in the class room. This gratifying freedom from sickness is doubtless partly due to the regular hours for eating and sleeping and the care exercised as to the personal habits and diet of the pupils. But it is also, I think, partly attributable to the system of physical drill which has been inaugurated. Three times every week all the pupils are given physical culture exercises, that of the boys being, in part, the course in use in the British Army for the development of muscular strength and endurance and includes such military evolutions as are feasible. This is the system of drill adopted by the British Board of Education for the schools of that country. The result is a decided improvement in the physique and bearing of the boys and it is also proving to have good disciplinary effects.

The Expenditure.

It is gratifying to be able to report that the expenses of the Institution have been kept down to a lower per capita rate than that of the previous year, despite the marked increase in the price of nearly all articles of food, clothing, etc. The cost of coal alone was $515 greater than that of last year. The price of meat, butter, milk, vegetables and fruit is all considerably higher, in some cases to the extent of twenty-five per cent. Our potato crop was a failure, necessitating the purchase of several hundred bags more than usual. There is also an increase in attendance of over ten per cent. Yet I am glad to say that not only has the per capita cost been reduced from $223.88 to $218.46, but the aggregate expenditure will be very little, if any, greater than that of last year. In order to accomplish this result it has been necessary to exercise the greatest possible care in buying, and economy in the use of supplies. The service, however, has not been stinted in any way, while the food supplied to the pupils is of the best quality and in quantity limited only by their appetites. I may say that no distinction in this respect is made between pupils and staff—the boys and girls get the same quality of food as is supplied to the Superintendent's home and the officers' and teachers' table.

Changes in the Staff.

There have been several changes in our staff during the last twelve months. Mr. P. Denys, who for thirty-three years was a most faithful and efficient teacher, retired at the close of last session, as he found that his health would not justify him in continuing longer at the work. Always painstaking and energetic and the embodiment of courtesy and devotion, Mr. Denys has during all these years exercised a strong influence for good over the pupils of the Institution, and his best and most enduring eulogy is the

high esteem in which he is held by the deaf throughout the Province. Two new oral teachers, Miss Burke and Miss Hammond, have been added to the staff. Mr. D. Cunningham, for twenty-nine years the baker here, died last January and his place has been taken by Mr. Boyd, who is proving very efficient. Mr. Forge, the farmer, resigned in the summer and this position has been filled by the appointment of Mr. H. Nugent, who has been added to our staff as Farm Instructor. A large proportion of our pupils come from the country and most of these will, no doubt, choose farming as their vocation. There is no occupation better adapted to the deaf than farming and gardening. These, however, in order that the best possible results may be obtained, must be carried on intelligently and in accordance with scientific principles; hence, instruction in the best agricultural methods should occupy an important place on our curriculum. Mr. Nugent, besides being a practical farmer, has the educational qualifications of a second-class teacher, and we trust he will be able to make this department of great practical utility.

Our New Curriculum.

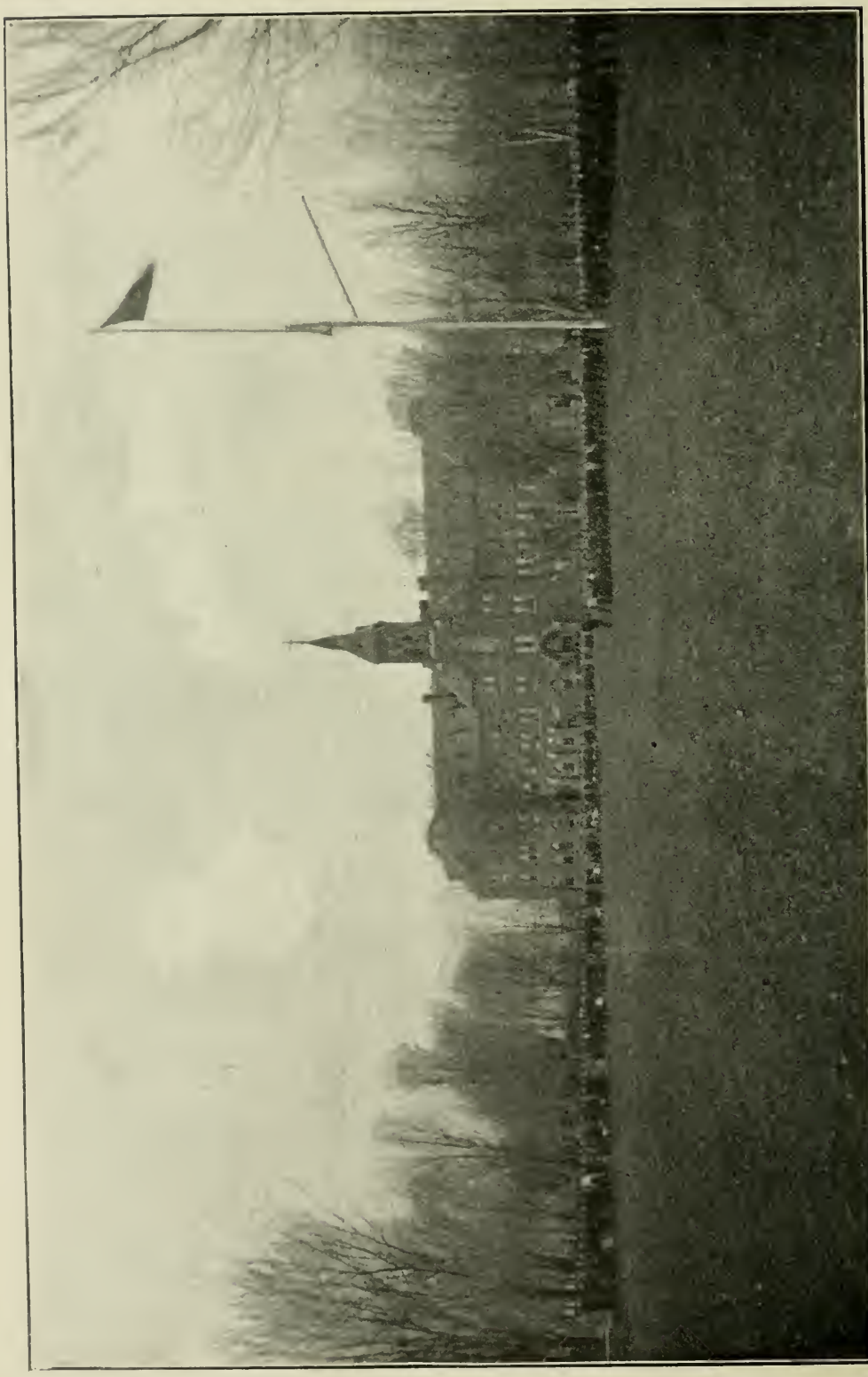
In view of the fact that this Institution has been placed in the department of the Minister of Education and now forms a recognized part of our educational system, it was deemed advisable to have a new curriculum of studies for the various classes. It was formerly the general idea that the deaf were a class by themselves and required special books and special courses of study distinct in character from those of other children; that, in fact, they were not capable of accomplishing the same work as hearing children. This idea has been proven to be erroneous. It is very true that in the first few years of school the character of our work is different from that of hearing schools, but this is not due to any mental peculiarities of the deaf, but to their lack of language. When a hearing child begins its school career, it knows the names and uses of all objects in common use and is able to express any ordinary ideas in reasonably correct English. The deaf child, on the contrary, does not, as a rule, know even one word of language. Hence, of course, our work for the first few years must be different from that of the public schools. If a hearing child began school without any knowledge whatever of language, it would have to begin in the same way. But, while all this is true, it is also true that the language taught the deaf should correspond to that of the hearing child in the various stages of its development. Our new curriculum, which was prepared by a committee of our teachers, was arranged according to this principle. The committee spent considerable time at this work during the vacation and went into the matter very thoroughly, and next summer the new programme will be revised in the light of this session's experience, when we feel confident it will prove to be a very serviceable and satisfactory one in all respects. As before stated, the purpose kept constantly in view was that of unifying our work with that of the Public Schools of the Province. While this is impossible at the beginning, for the reasons given above, yet the two curricula draw nearer and nearer to each other every year until in the higher classes they become identical. In order to fully accomplish this purpose, however, at least two advanced classes will have to be formed. The deaf child is entitled to at least as good an education as those who can hear, and this is now far from the case. At present our graduates would hardly equal, in their general knowledge and in their use of language, the pupils in the Junior Third class in our public schools, and this is quite too low a standard. Until this Institution is capable of turning out its graduates with an education equal to that of our public school children, it will not be doing its duty to the deaf of the

Province. This, as above stated, will necessitate the formation of two higher classes and a consequent addition to our staff, in which case we could hope to take up the work prescribed for the fourth class in the public schools, and even to prepare some of our brighter pupils for the High School Entrance examinations.

Our Library and Museum.

One of the most important aids in the instruction of the deaf, as of all children, is the reading of suitable books, papers and magazines. The most important and, at the same time, the most difficult part of our work here is to give the pupils a sufficient command of the English language, to enable them to express themselves intelligently and intelligibly in their business and social relations with hearing people. Other children "pick up" their language by hearing people talk; the deaf must acquire theirs in schools by slow, laborious effort. This is the chief part of deaf-mute education. But the language exercises of the class-room and the small amount of practice in the use of language thus possible will never suffice to give the average pupil facility in its use. To all this, reading must be added. It would not, I think, be too much to say that it is practically impossible for any deaf person, or, for that matter, any other person to become proficient in the use of language except through the medium of reading. Hence the great importance of trying to instil into our pupils the habit of reading. Nor is this an easy matter, as it is with most hearing children. The deaf child's knowledge of language is so limited and he is so dependent on what he has actually learned in the class-room that he finds little pleasure or satisfaction in printed matter, nearly every sentence of which contains words and idioms with which he is not familiar. This very fact is, however, what makes it so incumbent on us to try to give him a liking for and habit of reading, and this can only be done by beginning with him in the first or second year at school and making reading an essential part of each day's work. In our new curriculum we have arranged for such a systematic course of reading for each class, using for this purpose the Public School readers as far as possible. This, however, is not sufficient; the older pupils must do much more reading than what can be assigned for class-room work, if they are to grow up into the habit and liking for it. We are, therefore, making a selection of a few hundred books best suited for the pupils of the various grades, to be used for supplementary reading courses under the direction of their teachers. This, we are confident, will produce most excellent results in assisting the pupils in the acquisition of language and will, we trust, give most of them a reading habit, and a liking for and appreciation of good literature that will be of life-long benefit and pleasure to them. Of course, we do not expect to accomplish all this at once; the foundation must first be laid by beginning now with the lower classes and persisting in this course as the pupils advance from grade to grade. By systematic work of this kind we hope to change a condition in which even our best pupils cannot read a simple novel or even a common newspaper article understandingly into one in which the majority of them will be able to enjoy the rich literary treasures in which other boys and girls find such delight.

We have also taken steps to establish a museum in the Institution. By this we do not mean a museum in the ordinary acceptance of the term, but a comprehensive collection of illustrative objects and pictures for the assistance of the teachers and pupils in the class-rooms. Such things are useful in all schools; in a school for the deaf they are practically essential. A hearing child has a sufficient knowledge of language to enable his teacher to convey to him fairly clear ideas relative even to things he has



SALUTING THE FLAG.

never seen, but it is very difficult, sometimes impossible, to do this with a deaf child. Hence, the necessity of pictures or specimens of objects for this purpose. Such things as cotton, flax, coffee, spices, etc., in the various stages of growth and manufacture are most helpful, as are also pictures depicting national dress and customs, historical events, etc. We hope in the course of two or three years to have a sufficient variety of such things to meet all our requirements.

Religious Instruction.

The question of religious instruction is one of very great importance to the parents of our pupils; many deem it the most important of all matters that could engage our attention. We look as well as we are able after the physical well-being of our pupils and we give them the best mental training that we can, but it would be a great, a fatal mistake, if the vastly more important subjects of morals and religion were neglected. Whatever opinio may be held as to the advisability of religious instruction in the public schools, the case is quite different at this Institution. Hearing children have an opportunity to get their religious instruction at home and in the church and Sunday-school of their choice. Our pupils must get theirs at the Institution or go without, and the latter alternative is, of course, unthinkable. Our regulations for the religious instruction of our pupils are as follows: Every Monday and Friday afternoon there is a catechism class for the Catholic pupils, conducted by a teacher of that faith, which instruction is supplemented by occasional visits of Rev. Father Twomey. These pupils also go to church every Sunday when the weather is fit. On Sunday morning at nine o'clock the junior Protestant pupils are given instruction by a lady teacher. At eleven o'clock one of the teachers explains the International Sunday-School lesson for the day to the senior Protestant evangelical children. In the afternoon all the pupils assemble in Chapel and one of several teachers in rotation gives an address on some ethical or biblical theme. Of course, nothing of a sectarian nature is allowed on such occasions. After this address, the senior pupils who met at eleven are further instructed in the Sunday-School lesson in the form of question and answer. In addition to all this, Rev. Messrs. Beamish, Leitch, Drumm and Emerson of the Church of England, Methodist, Presbyterian and Baptist denominations respectively, visit the Institution on Friday afternoons in rotation and give such instruction as they see fit to the pupils of their respective churches. A similar privilege would be granted to the ministers of any other denominations, if they chose to avail themselves of it. Of course, all religious instruction on week days is given after school hours. It will thus be seen that our boys and girls are well looked after so far as their moral and religious training is concerned and that each one has an opportunity of being taught the doctrines and polity of his or her own church, while no one receives any instruction antagonistic to the tenets of the church to which he belongs. I may add that the ministers named above are not appointed or selected by myself to do this work, this is arranged for by the ministers of the various churches interested. The general satisfaction felt relative to this important matter was voiced by Rev. Rural Dean Beamish when in a recent sermon he eulogized "the excellent facilities provided at the Institution for the Deaf and Dumb for the religious instruction of the pupils."

Saluting the Flag.

Loyalty to our King and country and deference to the flag as representing our nationality are principles which should be inculcated in every Ca-a-

dian boy and girl. As one means of accomplishing this result it has been arranged that on certain national holidays and anniversaries the flag should be raised to the mast-head and saluted by all our boys formed in parade on the lawn. This was done for the first time on November 9th, the King's birthday, and the ceremony was a very interesting and picturesque one. This will be supplemented as occasion suggests by appropriate talks to the pupils when assembled in chapel.

Need of More Accommodation.

We are very greatly hampered in our work here for lack of sufficient accommodation. It is our desire and, I believe, the wish of yourself, the Government and the people, that the Ontario School for the Deaf should be maintained at the highest possible standard of efficiency. This, however, is quite impossible under our present restrictions, for our classes are entirely too large to enable this to be done. It must be understood that the work of teaching the deaf is and must be largely individual. In a hearing school all the teacher's instructions are heard by the whole class, as are also the pupils' answers, so that, if any one pupil gives a correct reply, every boy and girl is equally advantaged by it. With us it is quite different. In the manual classes the pupils write their answers and each one's slate or book must be separately examined by the teacher, and this is slow work and requires a good deal of time. In the oral classes, if the pupils are to get a sufficient amount of practice in articulation and lip-reading, it is even more important that the classes should be small. The average number of pupils in a class in the United States is 14. In nearly all the best and most progressive schools the number is only 12 to 14 in manual classes and 10 to 12 in oral classes. The consensus of opinion among educators of the deaf is that this should be the maximum number in a class if the best results are to be obtained. In our school the average in our manual classes is 19 and in oral classes 13. In only three or four other schools on the continent is the number so great. Under such conditions it is impossible for our teachers, no matter how hard-working and efficient, to accomplish results equal to those obtained in other schools with smaller classes. Moreover, if our oral work is to be further extended, more class-rooms are absolutely imperative, as well as more bedrooms to accommodate the necessary additions to our staff. Then, again, we have no gymnasium here nor any room where one could be fitted up, and this is considered a necessity in all boarding-schools. Moreover, neither the boys nor girls have a suitable reading and recreation room, an accommodation so important as to be practically a necessity. A new school building with modern equipment is the great desideratum, as the whole of the present building could be used to advantage for other purposes, some of our dormitories being now quite too crowded. Failing this, however, an extension to the main building would be inexpensive and would enable us to greatly promote the happiness and welfare of our pupils and greatly increase the efficiency of our work.

Our Farm and Garden.

The proceeds from our farm and garden the last year have not been very satisfactory, being considerably less than for the previous year. We were not singular in this, however, for all the farmers hereabouts, and, in fact, in most parts of the country, had a similar experience. This was, of course, chiefly due to the unfavourable weather conditions, and the peculiar conditions of this season affected us more seriously than it did many others because of the nature of the soil here. The land on our farm consists of a

Class in Home-Nursing.

clay loam on a bed rock lying just a few feet below the surface. In a very wet season the rock holds the water and the land becomes too greatly saturated; in a dry season there is no deep sub-soil to hold the moisture, consequently the land becomes entirely dry down to the rock, and this was the condition this year. As a consequence, our potato crop was almost a failure and all other crops were poor. We hope in the future that our farming operations will be carried on in a more scientific manner than in the past and that the proceeds therefrom will be greatly augmented. It seems to me, also, that our dairy herd should be sufficiently increased to enable us to furnish the whole of our milk supply, thus cutting off one considerable item of expenditure, ensuring a sufficient quantity of pure milk absolutely under our control and at the same time enriching our soil to the advantage of the various crops.

Home Nursing.

The chief purpose for which our pupils come to school is to get an education in the ordinary acceptance of the term, such as other children get in the public schools. But it is necessary, in a school of this kind, to do much more than this, for, to as great an extent as possible, the Institution must be both a home and a school. Hence it is important that, as far as we are able, we give our pupils the training which other boys and girls get, or should get at home. This is necessary for our girls especially, if they are to discharge well the duties pertaining to that highest and noblest sphere of female activity—the home. All of our girls are, therefore, taught to do all kinds of ordinary household work. They learn to make beds, to sweep and dust, to wash and wipe dishes, to set the table, to prepare food for cooking, to iron clothes—in fact to do everything they would learn to do in the ordinary home. Then in our Household Science department, after they have been here a few years, they learn the higher art of cooking, the quality and values of food, etc. In addition to this we have recently started a class in nursing for some of the larger girls, which is in charge of our trained nurse and which will, we doubt not, be of great advantage to the members of the class. This, of course, is not for professional purposes, but to give these girls a sufficient knowledge of the science and art of nursing to enable them to act intelligently and efficiently in ordinary cases of illness or accident, when the services of a trained nurse could not be obtained or would not be required.

During the summer new lavatories were installed on both the boys' and girls' sides. These are flushed automatically at regular intervals, which can be regulated as to frequency, and are of the most perfect and up-to- date construction in every respect, and no doubt they have been conducive to the good health as they certainly have been to the comfort and convenience of the pupils. This was an improvement that was very much needed, as the old closets were very unsanitary and repulsive, and will, with the assistance of disciplinary methods adopted, do away, to a large extent, with constipation, always so prevalent in this Institution as in all residential schools.

New Features.

The chief new features in our work, which have all been inaugurated during the past twelve months, are Oral Teaching, Home Nursing, Instruction in Agriculture and Horticulture, Physical Culture and a Teachers' Association. This Association was organized last session and holds regular monthly meetings, besides special ones when required, for the discussion of

subjects relating to the work of the Institution. These meetings have been very helpful in many ways and no doubt will be increasingly so in the future. In order that our staff may keep abreast of the times an opportunity will be given the teachers to attend the meetings of the Public School Associations of this county, and, if possible to do so, the sessions of the Provincial Association.

Fire Drill.

In addition to the new features above noted, fuller details relating to which will be found in other parts of the report, we have established a carefully devised system of fire-drill. These drills are held at frequent intervals and are varied to meet all possible contingencies. Inside the building an 18 inch gong has been placed for giving the alarm, the number of strokes on the gong indicating in what part of the building the fire is, while a whistle has been attached to the engine to summon outsiders. In every dormitory one or two hearing persons sleep. On the alarm being given each of these waken certain older pupils previously specified, and each one of these wakens a certain number of other pupils. In the day drills when all the pupils are in the dormitories they get out of the building in orderly procession in less than two minutes; at night, when all are asleep, in less than four minutes. The night alarm is given with smoke, it being the duty of any officer or teacher discovering the smoke will immediately ring the gong and give the general alarm. This accustoms all, both officers and pupils, to actual fire conditions.

Methods of Teaching the Deaf.

When I assumed the position of Superintendent of this Institution, my attention was very naturally at once drawn to the question of teaching methods. I was aware that a marked difference of opinion existed among educators of the deaf as to the best system of instruction, so I took the earliest possible opportunity of looking into the subject and obtaining the views thereon of those best qualified to judge. I visited a number of schools for the deaf in Canada and the United States and obtained, by correspondence or otherwise, the opinion of every superintendent and principal on the continent, and also studied the best printed matter bearing on the subject that I could obtain. I also discussed this subject very fully with Mr. W. H. Addison, Principal of the Glasgow School for the Deaf and President of the National Association of Teachers for the Deaf in Great Britain, and Mr. F. G. Barnes, Head Master of the Homerton School for the Deaf, London, and Honorary Secretary of the above-named Association, both of whom spent some days at this Institution last year. I approached this question with an open mind, having no previously formed opinions or prejudices, my one only object being to find out and adopt the system that experience had shown to be the most satisfactory as to results.

Although in previous reports the differences between the various methods have been defined, it might be well to briefly recapitulate in order that what follows might be the better understood. The various methods of teaching have been classified as the Oral, the Manual, the Auricular and the Combined. With the Manual is sometimes associated what is called Articulation work.

First, as to the difference between Articulation and Oralism. An oral class is one in which the teacher conducts his recitations chiefly by speech, the pupils receiving their instruction by reading the teacher's lips and themselves responding orally. The class remains continually in the oral teacher's

charge—it is, in fact, one of the regular classes of the school, but taught all the subjects in the manner indicated above, varied of course, as in hearing schools, by written recitations.

By Articulation is meant something quite different from this. In a school where articulation is employed, the pupils receive their instruction in the various subjects of study in manual classes and conduct their recitations almost entirely by writing and the manual alphabet, conventional signs also being generally employed to a greater or less extent. A selected number of pupils,however, go once a day for, say, three-quarters of an hour to an articulation class where they receive instruction in speech and lip-reading. These latter, in fact, become a very minor factor in the pupil's education, and no facts or arguments are required to convince anyone that it is impossible for any pupil, in so short a time every day, to acquire any great degree of efficiency in either speech or lip-reading.

In manual classes the pupils are instructed by the use of writing, finger-spelling and signs. The two former are indispensible in Manual schools and are useful adjuncts in all schools, no matter what method is employed. In most schools, however, the use of signs in the class-room has been abolished, or at least limited as much as possible, only such signs being allowed as may be necessary in explaining such words and ideas as cannot otherwise be made intelligible to the pupils. The reason is that signs stand for ideas and are of no aid to the pupils in learning the exact forms of language. Articulation teaching, as before indicated, is generally carried on in schools of this kind. Comparatively speaking, in Manual schools the instruction is given and recitations conducted chiefly by writing and finger-spelling, with speech-teaching only as an incident. In Oral schools, teaching of and by speech is the chief consideration, with writing and finger-spelling as auxiliary devices.

The Auricular method is applicable only to such pupils as have a sufficient amount of hearing to enable them to understand what is said to them either with the unaided voice or by the help of some mechanical device, one chief purpose being to preserve and improve this important sense. It has been found possible, in some cases, to develop the hearing of children to such a degree that they can be classed as only hard-of-hearing.

The term, Combined Method, is somewhat ambiguous. By some it is used to describe schools where part of the pupils are taught in oral classes and part in manual classes. Others apply it only to schools where the system employed is the manual, combined with articulation. The former use of the term seems to me the preferable. It is not a method of instruction but a term descriptive of schools in which two or more of the above described systems are used concurrently. All teaching in all schools is done either by the Manual or the Oral method, the auricular being but an amplification of the latter and never applicable to more than a very small percentage of the pupils.

In my investigations into this subject I found that on some points the opinions of the most experienced and successful educators of the deaf were almost unanimous. One was that whatever teaching of speech was attempted should be given in oral classes, as above defined, and not by the hour-a-day articulation method. Even a hearing child would not make very fast progress in learning to talk if its efforts were limited to only three-quarters of an hour a day. The same psychological principle is involved in the teaching of a foreign language, say French, to pupils in our High Schools. Pupils whose instruction in and practice in speaking French is limited to four or five hours a week may learn to read the language with facility but never become proficient in the correct pronunciation. The only way in which this can be acquired by a pupil is to surround him, as it were, with a French atmosphere,

that is, put him in a school or class where French is made the constant medium of communication, and he will soon be able to speak the language like a native. It is for a similar reason that an oral class is so superior to an articulation class for the teaching of speech. If the only point at issue, therefore, was as to how the child can best be taught to vocalize clearly, the decision would be a very easy one.

But a much more important question at once arises, and that is, which method will produce the best educative result? These pupils came to school to get an education—to gain facility in the use of language and to acquire such knowledge as will enable them to attain the highest possible degree of happiness and success in life. This is the final test, the decisive consideration. Power of speech would be of little use to a child unless he possessed a sufficient knowledge of language forms to enable him to express himself intelligently. Just here is where the advocates of the two systems join issue, each claiming the superiority of their method in this regard. Among educators of the deaf the preponderance of opinion and of observed results is in favour of oralism, so far at any rate, as relates to a large proportion of the pupils. In some of the schools visited I was greatly surprised at the facility in the use of correct language and colloquial idioms evinced by the pupils in the oral classes. It is generally considered that if the deaf child acquires enough language to make himself understood by hearing people, it is as much as can be expected or should be attempted. But a majority of the pupils in the more advanced oral classes that I saw could express themselves in clear, correct English; in fact, some of the work I saw done, particularly in composition, was equal to that of the junior grades in our High Schools. The only conclusion that I could arrive at was that oralism was the better system of the two for the semi-mute, the semi-deaf and the brighter of the totally deaf and this is logically what would be expected, inasmuch as pupils in oral classes get much more practice in the use of language than those in manual classes; for, frequent repetition and constant practice in the use of correct language forms is the whole secret, the absolutely essential condition of facility of expression. But even if the Oral were not superior to the Manual method, even if it produced only equally good results, it still would be greatly preferable, for then the orally taught pupils would have just as good an education as those manually taught and would have, in addition, the power of speech and lip-reading which the others have not—a very great advantage, indeed.

As to vocalization, while many of the semi-mute and semi-deaf will acquire speech scarcely inferior in quality of tone to that of hearing children, it must be admitted that few totally deaf children ever learn to modulate their voices agreeably or to articulate distinctly enough to be easily understood by strangers. Yet they can be understood, when accustomed to it, by their families, intimate associates and fellow-workmen, and this is a very real advantage and help to them. And even the sentimental side of the question is well worthy of consideration, for it may readily be conceived that, when a child, who has never before spoken a word in its life, returns from school and utters for the first time the words "mother," "father," etc., its voice, however imperfect it may be, will to its loved ones be the sweetest music that ever greeted their ears.

As I have already said, a large majority of educators of the deaf agree that oral teaching produces the best educative results for at least a considerable portion of the deaf and should be an important feature in the curriculum of every school. Opinions, however, differ as to what proportion can be successfully so taught. In some schools, over ninety per cent. are

taught by this method, the residue consisting of children of dull intellect who cannot learn much by any method. In other schools of equally good repute, a much smaller proportion are taught orally. One thing is certain, the ratio of those so taught has been continually increasing during the last quarter of a century, and the movement in this direction shows no signs of diminishing in force. In evidence of this I give the following figures, taken from *The American Annals for the Deaf*, which is the official organ of the Association of American Instructors for the Deaf, and not a partisan in the discussion as to methods:

SCHOOLS FOR THE DEAF IN THE UNITED STATES.

Statistics from the "Annals."

Year.	Total Schools.	Total Pupils.	Number of pupils taught speech.		Percentage of pupils taught speech.	
			a Taught speech.	*b* Taught wholly or chiefly by the Oral Method.	*a* Taught speech.	*b* Taught wholly or chiefly by the Oral Method.
1893	79	8,304	4,485	2,056	54 0%	24.7%
1894	82	8,825	4,802	2,260	54.4%	25.6%
1895	89	9,252	5,084	2,570	54.9%	27.7%
1896	89	9,554	5,243	2,752	54 9%	28.8%
1897	95	9,749	5,498	3,466	56.4%	35.6%
1898	101	10,039	5,817	3,672	57.4%	36.2%
1899	112	10,087	6,237	4,089	61.8%	40.5%
1900	115	10,608	6,687	4,538	63.0%	42.8%
1901	118	11,028	6,988	5,147	63.4%	46.7%
1902	123	10,952	7,017	4,888	64.1%	44.6%
1903	128	11,225	7,482	5,433	66.6%	48.4%
1904	133	11,316	7,601	5,508	67.2%	48.7%
1905	128	11,344	7,700	5,733	67.9%	50.5%

From this it will be seen that in the last thirteen years the proportion of pupils taught wholly or chiefly by the Oral method in the United States has increased from 24.7 to 50.5 per cent., while 67 per cent. are taught speech. In the same period the percentage of articulation and oral teachers has increased from 43.3 to 64.6. *The Association Review*, however, a magazine devoted to the interests of oralism, gives the proportion of pupils now being taught orally as 62.9, as compared with 50.5 from the *Annals*.

On the continent of Europe nearly all the pupils in France, Germany, Italy and, in fact, all the countries are taught orally. In Great Britain the system used varies in different sections of the country, but oral instruction greatly predominates. In Mexico and South America, also, the oral system is used almost exclusively. In Canada, exclusive of the Belleville Institution, 240 pupils out of 597, or 40 per cent. are taught orally.

In this Institution, up to last year, the teaching of speech was entirely by the articulation method, that is all the pupils received their education in manual classes, but about twenty-five per cent. of them went for three-quarters of an hour every day to an articulation class for instruction and practice in the art of vocalization and lip-reading. There had hitherto been no oral teaching, the first oral class having been started last January with, I may

say, most satisfactory results. We have now three oral classes, and in the future others will be established as our facilities will admit and the best interests of the pupils seem to require. These oral classes will be formed each term from the new pupils just entering the Institution, as in this way the most satisfactory results can be obtained. It does not seem advisable to begin oral work with pupils who have been here for a number of years, and in any case, we have not, at present, any facilities for doing so. All of the pupils, however, who have been taking articulation work in the past will continue to do so as long as they remain in the Institution. In this way, articulation teaching will be gradually eliminated and in a few years, by natural sequence of events, all speech teaching will be in oral classes. It is not our purpose, or do we deem it advisable, that all pupils should be taught by the oral method, but we would to adhere to the resolution adopted by the British Royal Commission, elsewhere referred to, that every pupil should be carefully tested as to his capability of learning to speak and that an opportunity for doing so be given every deaf child whom it would seem could be materially benefitted thereby.

British Royal Commission.

Some years ago the British Government appointed a Royal Commission for the purpose of enquiring into the question of the education of the deaf and blind. This Commission, composed of eighteen eminent men, spent two years in making an exhaustive enquiry into all matters relative to this subject, securing the testimony of the most successful educators of the deaf in Europe and America, the total cost of their labors being $230,000.00. The conclusions they arrived at relative to the question of methods are entitled to much weight and are as follows:—

"That every child who is deaf should have full opportunity of being educated on the Pure Oral System. In all schools which receive Government grants, whether conducted on the oral, sign and manual, or combined system, all children should be, for the first year at least, instructed on the oral system, and after the first year they should be taught to speak and lip-read on the pure oral system, unless they are physically or mentally disqualified, in which case, with the consent of the parents, they should be either removed from the oral department or taught elsewhere on the sign and manual system in schools recognized by the Education Department. The parent shall as far as practicable, have the liberty of selecting the school to which his child should be sent.

"That children who have partial hearing or remains of speech should in all cases be educated on the pure oral system. The children should in all schools be classified according to their ability.

"That there should be teachers in the proportion of one to 8 or 10 pupils in pure oral schools, and of one to 14 or 15 in sign and manual schools."

The Mosely Commission.

A couple of years ago A. Mosely, Esq., C.M.G., of England, set apart a sum of money for the express purpose of sending to America a number of teachers engaged in various departments of educational work, to investigate the methods of teaching in vogue on this continent. Among those selected for this purpose were two eminent teachers of the deaf, Mr. W H. Addison, of Glasgow, and Mr. F. G. Barnes, of London, to both of whom I have previously referred. These gentlemen spent several weeks in Canada

and the United States, visiting a number of the best schools. Having themselves had a long experience in the work of educating the deaf, they were peculiarly well qualified to pass an intelligent judgment on the various methods employed here, and to estimate fairly the quality of the work done and the results obtained. Their reports, therefore, possess great value to all educators of the deaf and all interested therein, and I take the liberty of including these documents in this report, believing that they will be of permanent value and interest, and will give a better insight into all matters pertaining to the instruction and training of the deaf than anything I could say.

MR. BARNES' REPORT.

For many years teachers of the deaf in Great Britain have had a valuable means of obtaining information on the work of educating the deaf in America. Through the instrumentality of the "Volta Bureau," almost every school has been regularly supplied with school reports, and all the published literature appertaining to the schools and institutions for the deaf on the other side of the Atlantic.

The very existence of the "Volta Bureau" is typical of the difference between the estimation in which education is held in the Old Country and the New World.

Founded by Dr. A. Graham Bell with the money he received as the "Volta Prize" from the French Government for the invention of the telephone, the "Volta Bureau" in Washington was built and endowed "for the increase and diffusion of knowledge relating to the deaf."

The information so generously supplied to teachers of the deaf in this country has proved of the greatest interest and value, and has tended to stimulate a keen desire to become personally acquainted with the work done in the deaf schools in America. It was, therefore, with pleasure I found I was able to avail myself of the offer of Mr. Mosely to personally ascertain the position of the work, and I outlined a number of headings bearing on almost every phase of the work, with a view to obtaining a good idea of the points of agreement and difference between our methods, conditions and results, and those obtained in America.

I also desired to obtain information relating to the "blind-deaf" and of the work among the blind; and finally any points bearing on the whole question of segregating and training mentally-defective children.

The Deaf.

A comparison of the condition and results of the education of the deaf I found very difficult to make, as in the short period of seven weeks it was almost impossible to do more than gain a superficial impression of the work of the deaf schools in the Eastern States of America and Canada.

As in this country the schools are far apart, but the distances between them are much greater. This involved long journeys and, consequently, it was thought best to select typical schools and spend, when possible, several days in each, rather than attempt to see a large number of schools and have less time to actually examine the work.

The following schools for the deaf were visited:—

The New York Institute, Fanwood (450 pupils).

The Institution for the Improved Instruction of Deaf Mutes, Lexington Avenue, New York (250 pupils).

The Wright (Private) Oral School, New York (25 pupils).

The Columbia Institution (Gallaudet College), Washington (100 students).

The Kendall School for the Deaf, Washington (60 pupils).

The Pennsylvania Institute for the Deaf and Dumb, Mount Airy, Philadelphia (500 pupils).

The Home for Teaching Speech to Little Deaf Children, Bala, Philadelphia (63 pupils)

The Western Pennsylvania Institute for the Deaf and Dumb, Edgewood Park, Pittsburg (225 pupils).

The Day Schools for the Deaf at the Normal Practice School, The Yale School, the Darwin School, the Goethe School, The Burr School, Chicago (about 250 pupils).

The School for the Deaf, Milwaukee, Wisconsin (70 pupils).

The Michigan School for the Deaf, Flint, Mich. (380 pupils).

The Western New York Institution for the Deaf and Dumb, Rochester, New York (200 pupils).

The Ontario Institute for the Deaf and Dumb, Belleville, Canada (240 pupils).

The Mackay Institute for Protestant Deaf Mutes and Blind, Montreal (60 pupils).

The Catholic Male and Female Institutions, Mile End, and St. Denis Street, Montreal (about 300 pupils).

The Clarke Oral School, Northampton, Mass. (150 pupils).

The Horace Mann School for the Deaf, Boston, Mass. (150 pupils).

The American School for the Deaf, Hartford, Conn. (180 pupils).

The total number of children in these schools in round numbers was about 3,400, or nearly one-third of the whole number in the schools for the deaf in the United States and Canada.

The fact of coming into contact with such a large number of pupils and their teachers gave an opportunity of forming some valuable general impressions, but I attach much more importance to the opinions expressed by experienced American teachers than to any conclusions I was able to form from my own observations.

Conditions and School Attendance.

In Great Britain the education of the deaf is compulsory, and practically every deaf child is now brought into the schools. Experience has shown in England that since the passing of the Act of 1893 the general average of intelligence of the deaf children coming under instruction has been lower than it was before the passing of the Act, and this points to the conclusion that the lowest type of children do not attend school so well under a "permissive" law as they do when attendance is compulsory. In America, generally speaking, there is no compulsory attendance for deaf children. In some States, deaf children are supposed to come under the general statutes enforcing attendance at school, but even in those cases the "two-mile-limit" similar to the clause in our English Education Act renders the law inapplicable to the majority of the deaf children, very few of whom live within two miles of the school for the deaf.

The last census gave the deaf population of the United States as 89,287. Taking the usual one-fifth of this number as being of school age (though owing to the extension of the school age in America the proportion should be

larger than one-fifth), there ought to be about 18,000 pupils under instruction. The last return given of the children in the schools showed a total of less than 12,000.

Number of Schools in United States	131	Pupils...	11,259
Number of Schools in Canada	6	Pupils...	735
	137		11,984

This appears to point to the fact that about 33 per cent. of the deaf children in America are not under instruction, and bears out the complaints of many teachers that promising pupils are often retained in their homes after the summer vacation because their labour, especially in agricultural districts, is very valuable. It also to some extent confirms a statement given in the Report of the Board of Education of New York City, that 700 deaf children are not under instruction, though perhaps this number is exaggerated.

American children appear bigger, better developed, and more matured than the majority of our town-bred children in England, possibly from the reason stated above—the lower type such as we get being presumably absent. It seemed to me, therefore, that the standard of intellectual capacity among the children entering the American Schools for the Deaf was higher than in our British Schools.

Of the children in the schools, too, there appeared to be a larger proportion of semi-mutes and partial-hearing children than is the case in our own schools.

As a rule the school course was arranged for 12 years, and the object of the school work appeared to be the production of the "graduating" pupil, *i.e.*, the pupil who remained in school until he completed the full course. The schools in many cases were larger than ours and so permitted of better classification, with the result that in the higher grades of the schools there was to be found a selection from a larger number of pupils than could be the case in smaller schools, and sometimes there were several divisions of the same grade—a, b, c, d, so that in a and b grades, there might be the "crême de la crême" of several hundred pupils, and among these there would be a large proportion of partially-hearing pupils, or of those who had lost their hearing after they had acquired speech, and had had the advantage of the intellectual development inseparable from the possession of speech up to that point.

Systems of Instruction.

Repeated statements have been made in this country that children taught on the "manual" method, or a "combined" system, are mentally superior to the "orally" taught deaf, except in a few special cases; and comparisons have been made between what has been termed the "American System" and the oral method, as mediums for the education of the deaf. Statements based on those comparisons have often been made to the effect that the deaf of America are better educated than the deaf at home because they have the advantage of being instructed by the "combined" system. These statements are made by those who are opposed to the general adoption of the oral method of instructing the deaf, and consequently I made a special point of not only observing the methods and results bearing on this question, but also, asked for and obtained the opinions of all the experienced teachers of the deaf, with whom I came in contact.

In the schools visited I found the same diversity of opinions as to the methods to be adopted in the instruction of the deaf as are to be found in this country. There is no "American System," and the methods vary in almost every school Some schools were entirely oral, and others were conducted under some form of the "combined" system. But the interpretation of the latter term varies very widely. In some of the combined schools almost the whole of the class work is carried on by the oral method, and only a few pupils are taught manually, by means of the single-handed alphabet and signs; but in other schools the proportion of time and attention given to the two methods is entirely reversed, and the whole of the instruction is carried on by silent methods, sometimes almost entirely by "signs," and speech is only taught to a few pupils for a short period each day.

For instance, in one school only 50 per cent. of the pupils received any oral instruction, and in this case they were only taught to articulate and read speech from the lips for 36 minutes daily—the time of one teacher being divided for three hours between five classes; in another school only 25 per cent. of the pupils were under instruction orally for 40 minutes daily, and in each case the remainder of the school period of more than four hours was given over entirely to silent methods. This form of combination appeared to me to be unsatisfactory; the short time devoted to speech was wasted for practical purposes in the majority of cases, as neither facility nor intelligibility could be obtained with so little attention paid to the subject, and no good results could possibly be expected from speech which was being treated rather as an accomplishment or an "extra," than as a constant means of communication.

In some of the schools visited every encouragement was given to the full development of speech, and it was only relegated to a secondary position, or dropped altogether, when experience had shown that apparently it was going to be of little practical value in the after life of the pupil. In a few schools it was maintained at all costs, utilized to the fullest extent both as a means of instruction and in the daily out-of-school life of the pupils, and yet, so far as I could find, there was no loss of mental development, there was no cramping of the natural vivacity and character of the pupils, and the attainments were quite equal—where they did not actually surpass—those of similar pupils in "combined" schools.

On this point the opinion of one of the most able and experienced of the principals of American Institutions is valuable. He says:—

"Articulation teaching as a sort of ornamental branch, not highly ornamental at that, is a very different thing from teaching speech by and through speech and as a means of mental development and mental culture. The former is but the dim shadow of the end sought for, while in the latter is found the full fruition of the teachers' aims and efforts, the realization of the pupils' desires, the fulfilment of the parents' hopes and prayers.

"There are but two methods of teaching the deaf, the oral or speech method and the manual or sign method. All methods that are not oral in principle and practice are manual The attempt to combine these two methods in the instruction of the same pupil, under what is styled the "combined" system, is, in my opinion, for the production of the best speech results, a demonstrated failure: they do not, will not, cannot combine."

According to recent returns the number of children taught speech in American Schools has increased from 27 per cent. to 67 per cent. in the last 20 years. The following summary taken from the Association to Promote

the Teaching of Speech to the Deaf in 1904, gives useful information, not only of the extent to which speech is taught, but also to what extent it is used by the pupils:—

	United States.		Canada.	
Taught speech	7,578	67%	354	48%
Not taught speech	3,681	33%	381	52%
Speech used in school and outside	2,050	18%	179	25%
Speech used in school and spelling outside	10	0.1%	75	10%
Speech used in school, spelling and signs outside	1,655	15%	5	0.7%

Of the 67 per cent. taught speech 48.3 per cent were taught entirely orally, 17.9 per cent. have lessons in articulation and lip-reading, but it was not used as a means of instruction.

Enquiries were addressed to principals and experienced teachers in every school as to whether in their opinion every deaf child could be satisfactorily taught by the oral method, and the replies generally were against the universal application of this method. In some few cases pronounced oralists declared that every child except those mentally deficient could be so taught, but the majority of American teachers stated that they believed that some proportion of the children needed some other means of instruction, in order to prevent undue expenditure of time and effort, on what in some cases must be unsatisfactory results. Opinions differed greatly as to what proportion should be retained on the oral method, some placed the proportion as low as 20 per cent., whilst others claimed that 80 per cent. to 90 per cent. was not too high a proportion to ensure success by good oral teaching.

Generally, the instructors were theoretically against the admission of "signs" into the schoolrooms—even in "combined schools," though they had no objection to finger spelling; but in actual practice human nature was too strong for teacher and pupil, and finger spelling and signing went on freely, both in and out of school. The tendency to spell or sign whenever any difficulty arose in lip-reading resulted generally in a lack of effort and determination to perfect the power of lip-reading, which suffered in consequence, and confirmed the opinion of oral teachers that speech and lip-reading should be constantly used if they are to be effective, and that a combination of spelling and signs with speech must in the majority of cases tend to the annihilation of speech for the congenitally deaf. On the other hand, there seemed to be an advantage to pupils to be well versed in finger-spelling for use among themselves, especially for out-of-school use. With rare exceptions, totally deaf children before they have acquired a command of language must gesticulate in communication with each other, and this gesticulation gradually develops into a language of more or less "conventional" signs. Even under the strictest form of oralism, some years must elapse before speech becomes a habit with such a child, and communicating daily by signs with his fellow-pupils tends to establish a sign-language as the easiest means of intercourse. It is almost too much to expect that a difficult and limited amount of speech could ever be willingly substituted for this, but if finger-spelling were adopted, the children could gradually be led to its use in preference to signs, at least so far as their knowledge went, and in this way the pupils might obtain some practice in the use of "English" among themselves. This would ultimately be of great

benefit to their speech and lip-reading, and in one American school great advantages were claimed for the substitution of spelling for "signs." But whatever method is adopted, what I saw in American schools led me to the conclusion, supported by the firm opinion of many American instructors, that any form of combination of finger-spelling or signing with oralism in school was not a success, and that the ultimate solution of the quarrel of the systems will be that as large a proportion of pupils as possible will be taught orally, and the remainder by the finger alphabet method, to the exclusion of signs as far as schoolroom work is concerned, and if these different methods could be carried on in entirely different schools, it would be better than in separate departments of the same school. It was generally recognized by the American teachers that some sort of classification of deaf children was desirable.

"One of the most pressing needs of the American schools, whether deaf or hearing, of the present time, a need that is receiving careful consideration at the hands of our best educators, is a new classification of pupils for purposes of care and instruction. Up to this time, but one basis of classification, that of mental development, has been recognized. All classes of children are received into one and the same school, regardless of physical conditions or previous advantages. In our special schools, the totally deaf, the semi-deaf, the mute, the semi-mute, and in too many instances, the feeble-minded, are admitted to the same school and maintained there regardless of consequences. It does not infrequently happen that children, partially deaf, or recently become deaf, with speech but slightly affected, are placed in schools where they are, perforce, suffered to mingle with children wholly unlike themselves. This is a great wrong, an unnecessary wrong, a wrong that some day must be righted. Our schools, of whatever character, should be so systematized that proper segregation and classification on a physical as well as a mental basis may be easily and readily carried into effect. The semi-deaf and the semi-mute should constitute one class, and be maintained and instructed according to mental advancement by themselves: the congenitally deaf should form another distinct class, to be classified and graded and instructed by themselves: and the feeble-minded and those of very low mentality, whether born deaf, or semi-mute, or semi-deaf, should constitute quite another class, and be instructed and maintained in schools quite apart from the others."

This method of separating the semi-mute and semi-deaf and the feeble-minded children has been tried with great success in Denmark and Schleswig, and much interest was evinced by the teachers in America in the arrangement in London of providing schools for elder pupils, and a school for the mentally defective deaf. This was considered a step in the right direction, but only a step, and some form of separate provision for the semi-mute and semi-deaf, away from the totally congenital deaf was considered advisable. Attention is being paid to this matter in the State of New York, and it is probable that in the near future something will be done to set apart various Institutions for dealing exclusively with one particular class instead of each school attempting to deal with every form of deaf-mutism which presents itself.

Results.

The points of chief interest to British enquirers appeared to be:—

(1) How do the results of the teaching in American schools compare with what is done for British deaf children, up to the age of 16?

(2) What do the American pupils gain by their longer school period and the effect on the individual and the class as a whole?

In going through the various schools, one could not fail to be struck with the similarity of the methods and means adopted in dealing with the children. In nearly all schools the early stages in the Kindergarten and Primary departments were devoted to "sense" training, the gradual acquisition of the elements of speech (articulation), and the building up of simple language. In this they correspond to the initial stages in Great Britain, except that in some of the American schools facility in the use of simple language and lip-reading was developed much earlier than with us by means of simple stories. Some most interesting examples were given of the ability of children of from 18 months to 2 years in school to understand and reproduce in speech and writing a short story told by the teacher. Proceeding much on the same lines of the development of language as with us, the pupils passed through the lower grades of the school, up to the fifth or sixth year, when there was a more general adoption of ordinary school books for such subjects as arithmetic, geography, history, and literature.

After the completion of the fifth or sixth year, when the pupils reached the advanced grades of the school, instead of each teacher taking the whole of the subjects it was a common practice to "specialise" on definite subjects. Thus, one teacher took the whole of the arithmetic of the upper school, another the geography, etc. This plan appeared to work admirably in many ways. It produced greater co-ordination in the subjects throughout the whole of the upper school; it afforded the pupils the benefit of profiting by the best teacher of each subject; it gave the teacher the opportunity of making a hobby of his or her own subject and collecting all the various objects and illustrations connected with it, likely to interest and help the pupils.

The language of the ordinary school books used in the upper grades was, as a rule, too difficult for the pupil's full comprehension, and it was in some cases doubtful whether there was not a waste of power involved in having to translate down to the pupil's capacity the idiomatic phraseology of the books. The results, however, seemed to justify the means adopted, as the students became more and more accustomed to the use of books, to draw their own facts from books, and referred to them freely for information.

With the extended school period available this appeared to be quite successful. Whether it would be equally satisfactory with the shorter school life of the deaf pupil in Great Britain is open to question. A means which may be successful when begun with pupils at 12 or 13 and continued until 18 or 19 might not produce even proportionate results with a school-life brought to a close abruptly at 16.

It is unfortunately true that British deaf children are not as a rule sufficiently advanced at the age of 16 to be able to use ordinary books with interest or profit, and except in the case of brighter pupils the ability declines rather than increases after the pupils leave school. It seemed to me that the introduction of school books at an early period had two good results; first—it met, and to some extent overcame, the difficulty of book language earlier than with us; secondly—it had a most wholesome effect on the deaf child, by placing the standard of "normality" in his own hands, and making him comprehend exactly where he stood in comparison with his hearing brothers and sisters.

This use of books, too, gave a more general range to the knowledge of the pupils, and while this might not be so exact as is usual with British

children, it gave a broader outlook on life, and tended to greater self-reliance, whilst the individual effort needed to find information in a book helped in the formation of character.

Written tests were taken in a number of schools, and these showed that in the capacity to use original language in composition and descriptive writing, the pupils between the ages of 14 to 16 were no better than with us; in arithmetic and geography, the children did not seem to have covered so much ground, but in history and literature and the general knowledge involved in the acquirement of these subjects, they were ahead of our pupils.

These results carried on for two or three additional years just at the period when the pupil is beginning to comprehend the object of his education, and to find enjoyment in intellectual pursuits, has produced in the American schools a "graduating" pupil between the ages of 18 and 20 with a good command of language and ability to use it, either in a spoken or a written form, with a good general knowledge, and a full understanding of his relative position, in point of intelligence, with the hearing people with whom he will have to mix in after life. "Graduation" means having come through the complete course prescribed by the school, but does not imply that the student has proved by examination that he has reached a certain standard of attainment.

It was variously stated that from 40 per cent. to 60 per cent. of the pupils reached the "graduating" stage; some of the remainder never reached that point of mental development though they remained in school; and others left before they had been long enough to reach it; so that it is difficult to make a definite comparison of the final results of the system on the whole of the deaf pupils of America with our own. There can be no doubt that for those who completed the school courses the results must be considered very satisfactory, and this achievement by even a proportion of the total number of students has a bearing on the status of the whole of the deaf population and gives them a standing in the outside world which is better than with us.

Another factor which has had a bearing on the higher results of the education of the deaf in America has been the establishment of the Columbia Institution for the Deaf and Dumb (Gallaudet College), Washington.

This institution provided a college career for young men and women after they have completed the work done in the ordinary Deaf and Dumb schools. The syllabus says:—

"The college makes provision for thorough instruction in the essentials of a liberal education, without attempting to do the special work of the polytechnic schools on the one hand or that of the University on the other. The course of higher instruction leading to collegiate degrees occupies four years, and embraces courses in:—

"Languages (Ancient and Modern).
"Mathematics.
"Natural Science.
"History.
"Philosophy and Political Science.

"The entire curriculum, including an introductory year, embraces five "years.

"The Corporation of the College is authorized by Act of Congress to " 'confer such degrees in the arts and sciences as are likely to be usually " 'granted in colleges.' "

Football Team, 1907.

The fees amount to 250 dollars per head per annum, but provision is made for the admission of students by means of scholarships, a certain number of which are annually open to students nominated by the District of Columbia, and the States and Territories in the Union.

The students entering the college are naturally the cream of the educated deaf from the various schools and institutions of America, and it seemed to me that the provision for the higher education of the deaf was not only an excellent thing in itself, but was fraught with far-reaching effects on the whole spirit of deaf-mute education on that side of the Atlantic. For instance, immediately after the college was established, the principals of the institutions for the deaf met and passed the following resolutions:—

"That this Conference recommends the establishment of high (*i.e.*, "secondary) classes in all the institutions where they do not now exist."

"That we recommend that the course of study in these high classes be as "far as possible in harmony with the course required for admission to the "National Deaf-Mute College."

Thus it will be seen that the standard set by the College served to bring all the schools into line, and to make the schemes of instruction lead towards the same end. It served to stimulate ambitious pupils and their teachers, and created a valuable public opinion in favor of higher education for the deaf.

No provision exists for the higher education of the deaf in Great Britain, and, no matter how gifted, only the very wealthy can possibly avail themselves of the channels open to the hearing of proceeding to ordinary colleges to obtain a liberal education. The private tuition necessary to prepare for a collegiate course is out of the reach of the majority of the deaf in Great Britain, and the absence of a highly educated class among the congenitally deaf leads to the natural conclusion in the average mind—ignorant of these facts—that the deaf are incapable of higher education.

Gallaudet College has disproved this, and in doing so has raised the public estimate of the deaf in America, and has become a goal which every aspiring boy or girl in the deaf schools of America may hope to reach.

Some schools and institutions do not contribute pupils to Gallaudet College, preferring, where possible, to send them to the ordinary Universities. There are many instances of success in this course, and recently several deaf pupils passed satisfactorily through Harvard. But these would naturally be not only exceptionally bright intellects, but must besides have been sufficiently well-to-do to be able to bear the expense, and in any case this plan could not suit all the well-educated deaf, so that I consider the Gallaudet College a most valuable adjunct to the whole scheme of the education of the deaf in America.

Institutions v. Day Schools.

The differences of opinion among teachers of the deaf in America on the question whether institutions or day schools are the better for the education of the deaf are as acute as they are on this side of the water.

Many experienced teachers hold that by congregating large numbers of deaf-mutes in an institution, there is a danger of accentuating their abnormality, of increasing the tendency to "sign," and also to add to the danger of the establishment of a deaf varity of the human race, by increasing the likelihood of intermarriage. The advocates of the day-school system further claim that unless the deaf child is surrounded by hearing and speaking people he has not the proper inducement to speak and lip-read, and that, as a consequence, institution life is detrimental to oralism, and renders the pupil less

self-reliant. On the other hand, the advocates of the institution plan strongly assert that very few homes are suited to the proper training of a deaf child, who is generally misunderstood, and consequently alternately petted and harshly treated; that the all-round training of an institution is quite as important as other branches of teaching; that the day-schools have not the same opportunities for classification or industrial training; and that while institutions are necessary for children from scattered districts they are preferable for all.

My twenty years' experience in both types of schools in England had made me familiar with all these arguments, and I found no new points in connection with this question during my visits to the day schools over there.

Chicago is the largest city having the day school system fully developed, and there were about 250 pupils scattered in 11 centres. One of the great difficulties in dealing with defective children in day schools is that of grading. It is almost impossible to collect into one centre sufficient pupils to classify properly. This is overcome in London by the Education Authority paying the fares of children travelling by train or tramcar, and we are thus able to get together enough children of one type to make a fairly well-graded centre. We have also a system of boarding-out to meet cases where for any reason travelling to a centre is impossible.

There appeared to be no such provision for "transportation" in Chicago, Milwaukee or Boston. In Chicago, however, the difficulty of classification was partly overcome by an arrangement of the superintendent to set apart certain centres for the reception of pupils of certain grades or stages of instruction. But there was no means of enforcing attendance at any particular centre, and if a parent declined to send a child to the centre most suitable for his training, the teacher at the nearest centre had to make the best of the position, and give what personal attention was possible to such child.

In the States of Wisconsin and Michigan, small day-schools are spread up and down the States, and a system of boarding-out under the supervision of a competent superintendent is carried on. Dr. A. Graham Bell says: "Wisconsin has startled America by the success of her methods" in dealing with the deaf. In all three cities mentioned the day schools were well organized and doing excellent work, and in some cases children were proceeding from them to "hearing" high schools. But in all these places the teachers agreed that the method pursued in London of providing schools for elder scholars, where definite instruction in trades could be given, as well as the segregation of the defective deaf from the ordinary classes was a better arrangement than their own.

A return made last year gave the number of pupils in day schools as 950 under 150 teachers.

Of course, the industrial side of the training given in the day schools is not nearly so well developed as in the majority of the institutions.

Infant Schools.

The Blind and Deaf Children's Act of 1893 makes the attendance of deaf children compulsory at the age of 7 years, but in many schools children are received earlier if presented. But we have nothing in this country to correspond to the "Infant" or "Kindergarten" schools for the deaf which have been established in America during the past 20 years. Some four or five of these schools have been established by private effort, and one has recently been taken over by the State of Pennsylvania. The main claim of the originators of this movement is that a deaf child cannot successfully be taught to

speak unless he acquires speech as nearly as possible at the same period of life as the hearing child does; and, that unless he is trained in speech habits in infancy the vocal organs become rigid, and the speech acquired later is more artificial than it would be if practised earlier. Another claim is that if a deaf child can be put under expert instruction at the age of 2 or 3 years, it should be able to acquire in about 6 years such an amount of speech and facility in lip-reading that at the end of that period it ought to be able to take its place among normal children in ordinary public schools, and be able to take the lessons as well as a "hearing" child.

This latter prospect has attracted considerable attention in Great Britain, and it has been felt that if the statements made with regard to the success of this system will bear investigation, it would be a scheme worthy of imitation.

What I saw of one of these schools did not convince me of the wisdom of the scheme, and I found that American instructors who are better able to judge of the success of these experiments are very divided in their opinions on the point.

Some are in favour of taking the children away from their homes as early as possible and placing them in "Home" schools of the above character, where speech-effort and lip-reading may be encouraged all through their infancy; other teachers claim that the proper environment is the family, where the deaf child is surrounded by a number of hearing people, and where, if the home is at all intelligent, the deaf child would receive a much larger share of normal training than he can get as a unit among a little deaf congregation where the deaf pupils outnumber the hearing people around them by about 6 or 8 to one.

Apart from what appeared to me to be the more than doubtful wisdom of grouping in the same classes children varying in age from 3 to 8, the methods adopted did not commend themselves to me. No definite instruction in articulation was given, but the attempt was made to make the children acquire language in words, phrases and sentences as a whole. This is no doubt a splendid training in lip-reading, and helps to develop the faculties of observation and receptivity; the baby gabble it encourages helps to preserve the instinct of speech, and taken on the whole these methods would be excellent for little deaf children *under school age*; but they should then be placed under definite instruction in the production of the elements of speech, and their language taught on a scientifically arranged plan. It appears to be a false premise that the eye could be made to assume the whole of the functions of the ear,—and that without special direction and training. Yet this is what those who teach speech in words and sentences seemed to assume. They spoke words to the child, gave orders and commands, made use of the idioms of everyday life, and expected the child not only to understand them, but also to acquire the ability to reproduce them without special direction as to the manipulation of his vocal organs. For children with a large amount of hearing, or for those who lost their hearing as the result of infantile disease, this plan may prove satisfactory, but the same means applied to a totally deaf child, without any conception of spoken language, could not possibly produce the same result.

This absence of regular drill in the elements of speech (articulation teaching), both in the infant school referred to and one or two other schools for elder pupils where the same plan was adopted, did produce good lip-readers, but it did not produce intelligible speech as a rule among the totally deaf. This can only be acquired by skilful, careful and painstaking articulation teaching, and unless this is taken up fairly early in the child's school life, slip-shod speech becomes a habit which can never be eradicated. As a matter

of fact, children taught on the "element" method acquired in some of the oral schools greater intelligibility, and greater facility in the use of language by definite systematic instruction, in a much shorter period than the children who attended these "infant" schools, or schools where the "elements" were not taught.

With regard to the claim that children passing through a school period of 6 or 7 years under the above conditions could successfully take their places in the grades of the common schools the general opinion among American instructors was that it was an overstatement of the case, and with this view I entirely agree. It may be possible for specially gifted or specially favoured deaf children, but not for the totally congenitally deaf child of average ability.

Still there could be no doubt of the devotion and enthusiasm of both the "infant school" and "non-element system" adherents, and one could only wish that the same amount of enthusiasm was devoted to a more logical and systematic method of dealing with the problem of deaf education.

Aural Training.

One feature of the work in America which is greatly in advance of ours is the use of acoustic instruments for children who have remnants of hearing. This particular branch has never received in Great Britain the consideration it has deserved. Some experiments have been conducted at Glasgow, Margate, and more recently at my own school at Homerton. In many of the American schools, however, a large amount of trouble and expense has been expended on this particular point, and in some schools at least efforts have been made to utilize every vestige of hearing possessed by the pupils. At Rochester one classroom was equipped with 13 telephones, connecting each pupil's desk with the teacher's desk. At Flint a room was similarly equipped with a costly Akoulallion, at Milwaukee and New York much attention has been given to similar experiments, and several useful inventions for the use of the partially deaf had been devised by Dr. Currier and others.

In view of the great importance attached to this matter by Dr. Kerr Love and others in our own country, this feature of the American schools might well be copied more generally.

Industrial Training.

The extended course in American schools renders it essential that the pupils should receive during their school period some definite instruction in the trade or occupation they are likely to follow in after life. For our pupils who leave at 16, some forms of manual training, to inculcate habits of care and accuracy, and the methods and principles involved in the manipulation of the various tools and materials is sufficient to prepare them for their apprenticeship to the work they are to follow, but the general rule in American institutions is to provide fully equipped workshops for various trades. There the pupils receive training on workshop lines and go out fully competent to take positions as "improvers" or ordinary craftsmen. Tailoring, boot-making, cabinet-making, baking and printing are the most common trades taught, and almost every trade is represented in the great variety of occupations taught in the different schools.

For girls, needlework, dressmaking, fancy-work and housewifery were the principal occupations. In connection with the latter subject in several schools the teaching of "Domestic Science" was conducted on excellent lines.

In order to overcome the difficulty of making girls familiar with "home" conditions and preparing meals of the size and cost and with the utensils and means available in the ordinary household, and of performing all the little household duties which fall to the woman's lot at home, a small cottage was set apart in the school grounds, where six or more girls lived with the instructress for a period and conducted the whole of the housework, cleaning, cooking, washing, etc., for themselves. By this scheme, they got all the advantages of home life and ordinary household conditions, plus all the scientific training involved in the combination of theory and practice.

Laundry work was not considered a good opening for girls, as that occupation was overrun with Chinamen.

The general opinion seemed to be that the above conditions met the needs of the deaf in after life very satisfactorily and that the adult deaf compared favourably with the ordinary hearing people as to employment and remuneration. I felt, however, that these facts did not furnish any criteria on which similar experiments could be tried in this country. The whole of the industrial conditions are different, and any man capable of handling a tool, no matter how indifferently, was sure of finding work if he really desired it. Even such unskilled work as street cleaning was being paid for at the rate of $2 a day and sufficient hands could not be found. The demand for labour both inside and out of the towns, and for household helps, was greatly in excess of the supply.

Considering that agriculture is of such great importance in the States and Canada, and that so large a proportion of the pupils are children of farmers or farm labourers (in one school 150 out of 230 could be so classified), it appeared strange that this subject was not more generally taught as one of the serious occupations in connection with the institutions for the deaf. There were in many cases excellent opportunities for such training, and it would have been much more valuable to teach a big growing lad some of the operations connected with farming or fruit-growing than printing, which he would have no opportunity of following on the isolated farm from which he came; and of giving lessons in dairy work to some of the young women rather than devoting time to power-machine sewing, which they would never again come into contact with after leaving school.

The general equipment of the workshops was of a very practical character. All the latest inventions, such as planing and mortising machines in woodwork shops and linotype machines in printing shops, power-machines and button-holing machines in sewing-room, and mixing machines in bakeries, etc., were supplied in many of the schools and the elder pupils taught to manage them. Less importance seemed to be attached to the "risk" of allowing the deaf pupils to handle the machines, than would have been the case in this country.

Finance and Equipment.

Perhaps the most striking feature of all in American education is the liberality with which all forms of work among defective children are financed. In the schools for the deaf the staffs and equipment were provided on a generous scale. In addition to whatever endowments a school possessed, the State in every instance paid a capitation grant of from 230 to 300 dollars per year. In the purely State schools, *i.e.*, those entirely maintained by the State in which they happened to be located, the annual "appropriation" asked for from the State budget was a round sum calculated on these figures, and meets with practically no opposition.

The general "belief" in education extends down to the defective child, and as a result surrounds him with conditions far superior to any found in Great Britain. Even in our schools entirely supported by the rates we do not compare with the average American institutions for the deaf. Classes of from six to eight are the rule, especially in the junior oral classes. The rooms provided for these small numbers are large, light and airy, and allow for plenty of movement and change as well as the set lessons. There are numerous supervisors who almost or entirely relieve resident teachers of any duties out of school hours. There is plenty of office assistance, which not only relieves the head of a mountain of clerical work, but also assists the ordinary school work by duplicating lessons for the teachers and putting into permanent form the notes or questions supplied daily to the children by each teacher. In the institutions the general standard of comfort for the children appeared higher than with us. Their table was furnished with plated cutlery, glasses, serviettes, etc., on a scale which is not general in our institutions, and the dietary tables were liberal and varied. The day rooms were large and well furnished, and in addition there were fine study rooms where evening preparation could be carried on with comfort and success. The dormitories in many cases were divided into cubicles by partitions or curtains, and sometimes comfortable bedrooms shared by two elder pupils were provided. Last year a wish was expressed by the inspector of one State "that separate rooms for the pupils might be provided in *all* institutions." This accommodation for pupils surpassed in point of comfort the provision made for resident teachers in some of our schools at home. Usually each school had an auditorium or chapel, where the pupils assembled morning and evening for religious exercises. These auditoriums were in many instances beautifully arranged and decorated halls.

School libraries and museums were also a feature well worthy of imitation, if the space and money were to be had. Some of the libraries were endowed by "Carnegie" funds, to which were added yearly grants for addition and extension. As I have previously stated, the reading public among the deaf children of America appeared more numerous than with us. In several of the schools the teachers directed and controlled the reading of their pupils to the extent of requiring from time to time little synopses of plots, or descriptions of individual characters which could not be supplied without the pupil having previously read the whole of the book.

Another valuable adjunct to American schools in this connection was the general possession of a printing shop attached to the school. This not only served a useful purpose as a means of industrial training (printing being one of the best paid forms of employment among the deaf), but it also served to provide for each school a "journal" or local paper. This paper contained items of interest to every child and helped to establish a love of reading very early in school life. By a system of "exchanges" the elder pupils were kept in touch with what was going on in every school in the country. The printing shop proved valuable, too, to print school books suited to the capacity of the children in the various grades, and this largely accounts for the profusion of American school books for the deaf. The output of a school book entails no risk of financial loss in publication, as it does with us, and this served as an incentive to teachers to put their collected lessons into a permanent form.

To still further mark the differences between these conditions and those which obtain at home, it is only necessary to state that in some places "publication funds" are in existence; in one school at least money is accumulating —waiting until some work suitable for publication is brought forward to make use of it.

Training of Teachers, Etc.

As in this country, schools in America are suffering from the lack of a regular supply of properly trained teachers. Several references to this point appeared in the annual reports last year.

"During the last few years the attention of the profession has been called "more than ever before to the great importance of having teachers well trained "for the work. Heretofore many of the young teachers seeking admission "to the profession through normal classes have been poorly prepared as to "general education, and have had too low a conception of the requirements "of the work. Teaching the deaf is a high art, and one not easily acquired. "It is fraught with difficulties little suspected by those who have not encoun- "tered them in the school-room. It requires not only a broad general edu- "cation, but also highly specialized training."

"The growth in popularity of the oral method of instruction has created "a demand for well trained teachers which has not been fully met. When "the last generation of men and women took up the work of teaching the deaf "there were no trained teachers nor training schools for teachers. A young "lady fresh from the high school was given a class and told to teach. This "she did to her own satisfaction perhaps, but with the inevitable result that "the class suffered grievously at her hands. Such injustice is no longer "necessary, for there are now several training schools for teachers of speech, "the most notable being at Northampton, Mass.; Milwaukee, Wis.; Chicago, "Ill., and Washington, D.C. Besides these, teachers are trained at the vari- "ous State schools, but unlike the normal schools for the education of public "school teachers, there is no standard common to any two of these schools, "either in preliminary education or proficiency required for graduation. "Teaching a deaf child to speak has almost reached the dignity of a science. "It requires a knowledge of anatomy, and physiology of the vocal organs, "and a thorough understanding of the elements of spoken language."

The normal school at Washington is a department of the Gallaudet College. In Chicago and Milwaukee the normal classes are carried on in connection with the day schools and additional salaries are offered to teachers, who, holding the ordinary teachers' certificate, qualify for a diploma as a teacher of the deaf. In Chicago this additional sum amounts to about 200 dollars per annum. The normal department at Northampton is now partly carried on by the aid of funds placed at the disposal of the school by the Association to Promote the Teaching of Speech to the Deaf. This fund will be referred to later on.

Teachers of the deaf in this country are engaged at the present moment in a movement to unify the examining boards of the College of Teachers of the Deaf and Dumb, London; the Training College for Teachers of the Deaf, Fitzroy Square; and the Training College for Teachers of the Deaf, Ealing; and to establish *one* examination of high standard for all teachers of the deaf. The opinion is general among all those of experience in the work that the qualifications of teachers of the deaf should be equal to those possessed by teachers of the hearing, plus an additional qualification for their special work. It will thus be seen that efforts on the same lines, to procure high-grade teachers for this important work, are proceeding on both sides of the Atlantic, but the difficulty on both sides is a financial one, as the salaries offered are not sufficient to induce teachers to obtain the double qualifications.

In America the salaries ranged from 45 to 85 dollars per month for 10 months of the year, with residence, while for non-resident men they varied between 1,000 and 1,600 dollars per annum. There was a dearth of men

assistants at these salaries. Several principals told me they were prepared to give 1,300 dollars upwards for a competent man, but they were not to be had. The impression seemed to be that any professional man worth his salt ought to be able to look forward to at least 2,000 dollars a year, and, until there was some prospect of this, really capable young men would not remain in the profession. The result of this shortage of men was that the work has almost entirely passed into the hands of women teachers; in several schools young fellows of 18 to 20 were being entirely directed by women even in their gymnastics and games, an arrangement which would not commend itself to British ideas.

No account of American education of the deaf would be complete without some reference to the benefactions of Dr. A. Graham Bell. He not only founded and endowed the "Volta Bureau" for the diffusion of information relating to the deaf, but he has given 25,000 dollars to the Association to Promote the Teaching of Speech to the Deaf; he has annually subscribed 1,500 dollars to its funds, and last year further endowed the Association with 75,000 dollars to enable it to establish a normal department for the training of teachers of the deaf at Northampton in memory of his father, the late Dr. Melville Bell, inventor of the system of phonetics known as visible speech.

To sum up, as the result of my inquiry the most striking points of difference between our own efforts and those of America I found to be:

In Schools for the Deaf.

(1) The more general adoption of the "combined system" with a more elaborate system of "signs" and a single-handed alphabet for manual spelling.

(2) A school course extending over 12 years.

(3) "Higher education" as provided by Gallaudet College, and by the other schools sending graduates to colleges and universities.

(4) The adoption of ordinary school books for the study of History, Literature, etc., making reading more general and affording a wider knowledge to the pupils.

(5) Definite "Trade" teaching given in the large institutions.

(6) The absence of "compulsory" attendance at school, and the higher average "type" of pupils received into the schools.

(7) The liberality with which schools are financed, enabling every idea to be fully developed regardless of cost, making it possible to subdivide classes where necessary, even as low as from 3 to 5 pupils, and to provide costly appliances such as telephones and acoustic appliances.

(8) The benefactions of Dr. A. Graham Bell, which have materially assisted in developing and influencing the teaching of speech.

(9) And the official U. S. assistance in publishing reports of conventions, etc., thereby considerably helping in the diffusion of information on all matters relating to the work.

In conclusion, I would like to say how deeply indebted I was to teachers, superintendents, education officials and others with whom I came in contact for the courtesy and kindness I received in every place I visited. From the moment of landing in New York (where we were met by a representative of the teachers) and during the whole of the seven weeks spent in seeing the various schools and institutions, both in the United States and Canada, the greatest possible assistance was given by everybody in any way connected with the work. The fullest and freest opportunities were allowed for any investigations or enquiries I desired to make.

The whole tour was a most valuable and inspiring experience and I feel deeply indebted to Mr. A. Mosely for having organized the scheme, rendering the visit to America possible, and to the Education Committee of the County Council for granting the necessary leave of absence to enable me to take advantage of the scheme.

(Signed) F. G. Barnes.

MR. ADDISON'S REPORT.

Mr. W. H. Addison, Head Master School for the Deaf, at Glasgow, Scotland, writes of his recent visit to American schools for the deaf as follows: —

I beg herewith to submit a Report of observations made during a recent visit to some of the American schools for the Deaf. The tour occupied seven weeks, of which five were spent on shore. Owing to the long distances of the schools from each other, and the shortness of the time at my disposal, I judged it wise to confine my investigations entirely to the eastern portion of the continent, though I was informed that some of the Western States have made remarkable progress in education in recent years, and that some of the finest buildings and most progressive schools are to be found west of the Alleghany Mountains. It was with much regret therefore, that I found myself obliged to decline the very kind invitations which I received to extend my journey to the west. Everywhere I did go, I was received with the greatest kindness and cordiality, and I have to tender my warmest thanks to the many friends who combined to render the tour one of the pleasantest and most instructive it has ever been my lot to make.

The following is a list of the Institutions and Schools visited: —

New York Institution for the instruction of the Deaf and Dumb, Fanwood.

New York Institution for improved instruction of the Deaf and Dumb, Lexington Avenue.

New York Wright Oral School.

Washington Kendal School.

Washington Gallaudet College.

Philadelphia Institution for the Deaf and Dumb, Mt. Airy.

Philadelphia, Miss Garrett's Home for Little Deaf Children, Bala.

Rochester, Western New York Institution for the Deaf and Dumb.

Belleville, Ontario, Ontario Institution for the Deaf and Dumb.

Boston, Mass., Horace Mann School for the Deaf.

Boston, Mass., Sarah Fuller Home for Little Deaf Children.

Boston, Mass., New England Home for Aged and Infirm Deaf Mutes.

Northampton, Mass., Clarke School for the Deaf.

Hartford, Conn., American School for the Deaf.

In addition to the above I attended services for the adult deaf in New York, Philadelphia, and Boston, and had the privilege of speaking a word in season to the silent congregations of these cities in their own silent finger language. My reason for visiting these churches, apart from the interest I take in the moral and religious welfare of the deaf, was to obtain opportunities of meeting the adult deaf out of school, so as to check my opinion of the work of the school room by the results in the after life of the pupils. It was a great pleasure to meet so many intelligent deaf men and women, and the happy, contented, and prosperous appearance of the majority spoke well for the education and training they had received in the schools.

General Impressions. The most abiding impression which I brought back with me was that of the enormous material resources which are being lavished on every branch of education, and of which the deaf as a class are receiving a full share. In the equipment of her schools for the deaf, America far surpasses Great Britain. The care and instruction of the deaf seems everywhere to be regarded as one of the first duties of the State. In most of the States a State School is usually provided in a central locality at which every deaf child under the age of 21 can claim education combined with maintenance as a right. In a few of the States, the schools are managed by private corporations as in this country, but the laws under which they work are most liberal, and the grants which they receive per capita are calculated on a scale which to us seems lavish. The grant per head is never less than £50; £60 is paid by New York State, and even this large sum is, I believe, exceeded in the case of one school.

Nor does this liberal treatment by the State check the flow of private benevolence. Large donations towards the funds of Institutions are often made by private citizens. The magnificent Trade-School of the Philadelphia Institution was the gift of one of the directors; the Clarke School at Northampton was founded and endowed by the gentleman whose name it bears; the New York Institution is so wealthy, at least in the eyes of a poor Scot that the principal scarcely knows how to find an outlet for the accumulated wealth of the trust. Many of the most prominent citizens of the Republic give freely of their personal service as well as of their means. The interest taken in the blind-deaf by their enthusiastic friend, William Wade, the personal services and generous gifts of Graham Bell, are well known to teachers all the world over; but the interest of many others, who are not perhaps quite so famous as these two gentlemen, is no less keen and constant. One of the directors of the Institution at Philadelphia, has gone to the trouble of compiling a Book of English Historical Sketches of a most interesting kind, specially for the use of the pupils. The American School at Hartford possesses a fund devoted entirely to the publication of special lesson books, and the utility of such a fund will be appreciated by teachers when we say that Miss Sweet's well-known and highly prized readers have been made available to the deaf by this means.

Though the education of the deaf is not compulsory in America as it is in this country, the American people generally seem more fully alive to the value of education than are the people of Great Britain. This desire manifests itself in many ways. Boys and girls think it no shame to take any kind of situation during the summer, provided it will bring in a sufficient number of dollars to enable them to take a college course during the winter. Many seek occupations as farm helps, others go out as waiters in steam boats or sea-side hotels, while in one city I visited my boots were blackened by a student from Mr. Moodie's Bible Training College at Chicago. This desire for a good education on the part of poor students reminded me of the spirit which animated the Scottish people before the advent of factory-made cities had begun to sap the national ideas.

One result of this keen desire for education, and of the esteem in which the dispensers of it are held, is that the teachers of the deaf are much better paid than are the teachers of the deaf in this country. Salaries, as a rule, are at least double the rate that has obtained in this country in the past, and in addition, the teachers in the residential institutions are not burdened with the out-of-school duties which they so often have to perform in this country. Teachers are engaged as teachers, not as supervisors. Five hours hard work in school, and it is real hard work that is expected of them, plus

the proper and careful preparation of lessons and the correction of the pupils' exercises is considered an adequate day's work, and the domestic supervision is entrusted to its rightful department, the domestic staff. For this reason a good class of teacher, highly educated, sympathetic and full of enthusiasm, is generally to be found in the American Institutions.

Another advantage which the American schools can claim, is that their pupils stay longer at school then they do here. A ten or twelve years' course is common, and in one State at least a 17 years' course is possible, and entirely free of charge to the parent. It is therefore a common sight to see youths and maidens of 20 or 21 years of age attending school, studying hard the one half of the day and learning their trade the other half. It follows as a matter of course that the attainments of such pupils must be higher than those of our own scholars who leave school at sixteen, or, as was the case not so long ago, at fourteen. The provision for trade teaching to such pupils, in all the large institutions, is excellent, and the graduates on leaving school, step at once into the wage-earning class and become useful members of society. There appears however, a tendency to lower the age at which the children are admitted to the schools, with a corresponding tendency to lower the age at which they leave school. Whether this will be a beneficial change time alone can show.

The New York Institution at Fanwood.

This Institution is located in a commanding situation on Washington Heights, overlooking the Hudson River. The number of pupils is about 450 and the method of instruction is officially described as combined or eclectic The school is graded on the departmental plan, being divided into a Kindergarten, Primary, Intermediate, and Advanced Section, each section in charge of a principal teacher who is responsible to the Superintendent. The pupils however are all, or nearly all, housed in one huge building, a plan which may have excellencies, but also has very considerable drawbacks. In the teaching of language, Miss Barry's Five Slate Method is much used, as it is in many of the American schools, where it is found exceedingly advantageous in helping the pupils to classify the parts of a sentence. The medium of communication is chiefly the Manual Alphabet (single hand). Signs (natural and conventional) are used largely for explanatory purposes and for chapel and collective exercises. Instruction in speech and lip-reading is given to selected pupils. There are several blind-deaf pupils in the Institution who are well cared for, and the facility with which they can receive and give back ideas by means of the finger-alphabet, and the progress they have made in their studies, is remarkable and reflects great credit on their instructors. The provision for the teaching of trades is very complete, and comprises joinery, printing, sign-writing and horticulture. The printing-shop especially, under the charge of a very intelligent deaf man, is highly successful. A special feature of this school is military drill. All the pupils, and also the officers from the principal downwards, wear a neat uniform and the whole Institution is worked as a military school, even to the length of maintaining a fife and drum band. It seemed strange to hear of the "Star-Spangled Banner" being played by a band of deaf-mutes, but that was our experience. The explanation of this phenomenon is that amongst this large number of pupils there are many who are only partially deaf, and the principal has hit upon this expedient, combined with acoustic or ear-training exercises, for rousing the dormant sense and rendering it more sensitive to sounds. There is no doubt but that in many cases benefit has

accrued from this treatment. The military organization is also of value in helping to implant the idea of American citizenship into the minds of the people of all nations who are being dumped down into New York by the Trans-Atlantic ferries. The saluting of the flag at the commencement and close of the school is an institution which might well be copied by the schools of this country.

New York Institution for the Improved Instruction of Deaf Mutes.

This Institution is situated in Lexington Avenue in the centre of the city. The number of pupils is about 200, and the method of instruction is oral. As far as the situation and circumstances of the school allow, the work here is very thorough and good. The departmental system of grading obtains, as in the Institution referred to above. Geography is taught largely by means of imaginary voyages. Arithmetic is in charge of one teacher who devotes all her time to the subject and is consequently an expert. The manual training is based on educational lines, not on trade teaching. The woodwork teacher, a very intelligent man, does not insist on a very high finish, especially in the junior classes. He says that, in the present state of the American labour market, it pays better to train the pupils in adaptability and readiness to cope with emergencies in a rough and ready fashion. In the cookery room, the girls are taught to prepare a full meal for themselves, to lay out the table properly and to take turns in serving. If the dish is badly cooked, they suffer the discipline of consequences by having to eat it. On the other hand, if it is a success, the enjoyment of it is a full reward. The gymnasium is in charge of an expert, who keeps a register of the physical development of the pupils.

The Wright Oral School.

This is a private school for the children of the well-to-do classes. The system is oral, with acoustic training where it seems desirable. Everything that ingenuity can suggest and wealth purchase seems to be done here.

Gallaudet College and Kendall School. (Washington, D.C.)

The Kendall School is a small one of about 40 to 50 children belonging to the District of Columbia. The system of instruction is combined, and several of the teachers are deaf. The quality of the pupils' intelligence seemed rather poor, with the exception of the top class, a class composed of young men and women drawn from far and near, with the object of preparing themselves for the entrance examination of the college. This class exhibited a high type of intelligence.

The outstanding object of interest at Kendall Green is, however, the Gallaudet College, to which the Kendall School is a mere adjunct. This College, so called in honour of Thomas Hopkins Gallaudet, the pioneer instructor of the deaf in America, represents the life-work of the elder Gallaudet's young son, the well-known and highly esteemed Dr. Edward Miner Gallaudet. The object of this college is to place within reach of the more intelligent deaf-mutes a collegiate education approximating to the standard of the best colleges for the hearing. The full college course, admittance to which is gained by an entrance examination, embraces English, Latin, Greek, (optional), French, German, Logic, Natural Science (Botany, Zoology, Chemistry, Physiology, Physics), Mental and Moral Science, Gymnastics,

etc. The courses of study are carefully graded, so as to lead on the students step by step to higher and higher planes of thought. The medium of communication employed is the finger alphabet and signs, but provision is made for instruction in speech and lip-reading for those who desire it. In some of the classes the Professor speaks and spells simultaneously and with great facility, and the pupils seem able to take in the sense of both equally well. Two days were spent in this interesting establishment, and most of the classes were seen at work. The results, generally, in my opinion, were good. A class in German, conducted by Dr. E. A. Fay, struck me particularly as affording excellent testimony to the ability of deaf mutes to undertake this higher educational work. Coming fresh to the study of this difficult language less than six months previously, they had made such excellent progress that they were able to render into very passable German, fairly difficult English sentences spelled out on the fingers of their instructor. It is doubtful if any class of hearing students would have exhibited better results in the time. In a class-room adjoining, a class of eight girls were busily engaged translating an extract from one of the Cicero's orations into English. They seemed quite at home in the work, and, in the grammatical drill which followed this, they exhibited equal proficiency. Other classes seen at work were engaged in studying Physics, Medieval History, Chemistry, English Composition and Literature, Algebra, in all which subjects much good work was being done. If one might venture to offer any criticism of the work of this most admirable and unique institution, it would take the form of suggesting that the provision for oral teaching might be extended and made more thorough and systematic. This seemed to be the weak spot in what is otherwise a thoroughly equipped college for the higher education of the deaf; a college reflecting equal credit on its founder and principal, and on the American Government which has so liberally endowed and supported it.

The Pennsylvania Institution for the Deaf, Mt. Airy, Philadelphia.

This is the most magnificent Institution it has ever been my lot to visit. The number of pupils exceeds five hundred, who are housed in three large buildings entirely separate the one from the other, each in charge of a principal who superintends the educational work, and a matron who has charge of the domestic department, the whole responsible to Dr. Crouter, the general superintendent. The buildings, in addition to those above enumerated, comprise a splendidly-fitted trade-school, a hospital, gymnasium, etc., the whole situated in a park of some 40 to 60 acres, in a pleasant suburb of Philadelphia. The buildings, having been erected little more than a decade ago, are, of course, fitted up in the best modern style. They were planned under the supervision of the present principal, Dr. Crouter himself, and every device that an experienced teacher and superintendent could suggest seems to have been included in the arrangements by the architect. A special note should be made of the fact that all the rooms are very large, lofty and well lighted, the peculiar arrangement of the buildings being such that light is admitted to most of the schoolrooms from two or three sides.

The method of instruction is almost entirely oral, only about 6 per cent. of the pupils being relegated to the silent department. The manual alphabet is rigidly excluded from the schoolrooms, and no gestures or signs are tolerated except such as are made naturally and easily understood by hearing people. All the instruction is given by and through speech, except in the case of a few pupils who, from physical or mental weakness, are not considered suitable for this mode of teaching. The methods used for awaken-

ing the dormant intelligence of the pupils, for training them to articulate and read the lips, and for developing their language, are all excellent. The organization of the school is a model of completeness and suitability of means to end. The pupils first enter the Primary Department, where they receive a thorough grounding in articulation and lip-reading, and the elements of language. The course lasts three years. They are then transferred to the Intermediate Department, where they spend another three years of their school life. Here the elemental language forms and the vocabulary already acquired are enlarged, codified and made permanent. In the advanced department, the pupils, who may now be said to have acquired the elementary grounding in the mother tongue, receive instruction in such subjects as geography, history, etc., in the same way as they would if they were hearing children attending the ordinary elementary school, the only difference being that progress is somewhat slower and more repetition and explanation has to be resorted to. It is to be noticed that in this upper department the teachers teach subjects rather than classes, *i.e.*, one teacher takes the whole of the classes in geography, another history, a third arithmetic, and so on. This plan is found to work extremely well, the teachers being specialists in their subjects, know them better than the average teacher of all subjects can be expected to do, and the plan has the added advantage that the pupils get practice in reading the lips of more than one teacher.

It would be too great a task to describe in detail all that was seen during our six days' stay in this interesting establishment.

One more interesting fact must, however, be recorded, the unique case of a deaf teacher successfully conducting an oral class, a unique instance, one would imagine, but one which it is to be hoped will be imitated by many other ambitious deaf men and women.

In concluding this too brief notice of this well-managed and well-conducted Institution, mention may be made of the fact that the chapel and collective exercises are all conducted orally. I was asked to give a short address to the pupils, which I did, speaking as naturally as possible under the circumstances. The pupils seemed to follow with interest, but it may be permitted to doubt whether all really comprehended what was being said to them. In any case, the strain on their eyesight must be very great, and, speaking for myself, and with no wish to minimise the value of the great work that is being done, I still think the manual alphabet would be a useful adjunct in such a case.

Miss Garrett's Home for Little Deaf Children, Bala.

I spent the concluding day of my stay at Philadelphia in visiting this interesting establishment. The Home was founded by two sisters, the Misses Garrett, and is still carried on by the survivor. The fundamental idea underlying this effort is that, if you begin talking to your deaf child young enough, he will learn to speak and read the lips as naturally through the eye as a hearing child does through the ear. The proper place for a deaf child to learn this is at home, but as the parents of the deaf children have, as a rule, neither the time nor the knowledge necessary to impart this instruction to their offspring, Miss Garrett has hit upon the expedient of taking the children at as early an age as she can get them and training them by skilled teachers in small homes approximating as nearly as can be to the homes from which such children come. Miss Garrett maintains that if deaf children are put under training young enough and talked to constantly, they will be able

by the time they are ten or twelve years of age to go to the school for hearing children, and take their places along with their hearing brothers and sisters. Her "Homes" consist of two houses located at Bala, a suburb of Philadelphia. Here she has collected some 60 children of ages ranging from 2 to 12. Her success in getting her pupils to talk is considerable, but it is open to grave doubt whether the system is suitable for more than a very small minority of the deaf. That some of the more highly gifted ones may be able to take their places in a school for the hearing, after receiving such training as is given here, I do not doubt; but I do doubt the wisdom of reasoning from the few to the many, and I am of the opinion that special teaching in special schools must still remain a necessity of the case for the great majority of deaf children.

Western New York Institution for the Deaf and Dumb, Rochester.

This Institution is conducted on a method differing from those previously visited. Signs or gestures are rigidly excluded, and the pupils are talked to from the day they commence school by means of the finger alphabet (single hand). At the same time oral work is commenced, and all the pupils are taught to speak. The method is therefore termed oro-manual. The Principal (Dr. Westerfeldt) prides himself on the rapidity of his finger spelling, and he claims that, by this method, the pupils learn to understand and to use the language of their country in the natural way with ease and fluency. The result is certainly remarkable. The pupils do use English and they do not use signs, and, as far as it was possible to judge during the short stay made, there is much to be said in favour of this method. The institution is divided into two parts, a kindergarten and an advanced department. There is an excellent library and reading-room attached to the school, and the pupils seem to make a very good use of it. The pupils are allowed to read at meals, and many of them were found reading standard authors with evident zest and enjoyment. It must be remembered that they are much older than the pupils of our British Institutions. The pupils assemble for an hour-and-a-half's evening study in the dining hall. At meals the boys and girls sit together at the same tables, each table being in charge of an elder boy and girl, the girl at one end of the table and the boy at the other. The principal thinks that this arrangement works well and produces no evil results. Another arrangement at this institution which is uncommon is that of the pupils taking their places in the dining-hall every morning at twenty minutes to seven for Bible study, breakfast being served at seven. In this and other ways, though the school is large, a family atmosphere is engendered which helps to break down the cast-iron discipline which exists in many large institutions.

Institution for the Deaf and Dumb, Belleville, Ontario.

This was the only Canadian Institution I was able to visit. It is situated in a charming place on the beautiful Bay of Quinte, and is attended by over 200 pupils. The system of instruction is nominally combined, but little real oral work has been done. The classes are too large and the grading of the pupils not quite so thorough as it might be. A new superintendent has been appointed recently, a medical man, who had no previous experience of the work of educating the deaf. He is, however, an able man, full of sympathy for the pupils and teachers, and there is evidence that under his supervision much more oral work will be attempted in the future.

The school course at present allowed by the Government, seven years, is too short, and should be lengthened if a really satisfactory result is to be achieved. Much good work has been done by individual teachers, but with a larger staff, an extended course and a unification of effort, the results should be much better.

Horace Mann School for the Deaf, Boston.

This is a day school, and is carried on as a part of the public school system of Boston. The number of pupils is 145. As many of the pupils have to travel a considerable distance, they generally bring lunch with them, but there is a kitchen in the school building where those pupils who wish it can get lunch for 5 cents or a cup of chocolate for 2 cents.

The method of instruction is oral, and the Principal, Miss Fuller, aims at preparing the pupils to attain the standard of work which is reached in the schools for hearing children. The compulsory age of attendance begins at five years, but this law is not altogether strictly enforced with the deaf. Miss Fuller is of opinion that an average deaf child who begins school at five, will be about three years behind the normal hearing child in attainments when he leaves school. The school is well planned, the curriculum well graded, and the staff capable and ample. A feature worthy of imitation is the employment of a special teacher of speech, whose duty it is to give special drill in this branch, supplementary to the work done by the regular class teacher. For helping the intonation of the pupils, a piano is used, the pupils placing their hands on the frame while a tune is being played. This exercise seems to give pleasure to many of the pupils, especially the semi-deaf whose lethargic faculties are considerably aroused thereby. The special teacher also makes use of a variety of ingenious devices for improving the articulation of the pupils. One of the drawbacks to success in this school is irregularity of attendance, due to the distance the pupils have to travel daily. On the day of my visit, out of a class of eight first year's pupils, four were absent owing to the weather conditions. This is, of course, one of the disadvantages of the day-school system. The Manual Training scheme of this school is entirely based on educational lines, and is very thorough. Trades, as such, are not taught. A very useful adjunct to the school, though not officially connected with it, is the Home for Little Children at West Medford, a suburb of Boston. Here children under five are received and given an excellent Kindergarten training under ideal conditions. As a preparation for the special school, this training is indeed excellent and much to be commended.

Clarke School for the Deaf, Northampton, Mass.

Principal, Miss Yale.

This is the model oral school of America, if not of the world. It consists of about 150 pupils who reside in halls, named respectively Dudley, Baker, Rogers and Clarke Hall, all situated on the top of Round Hill, in the suburbs of Northampton, in the midst of sylvan scenery so attractive that is was formerly the chosen home of the celebrated Swedish songstress, Jenny Lind. There are not more than fifty pupils in each home, and the life they lead is made to approximate as closely to the family ideal as possible. The principal, the teachers and the pupils, all take their meals together, and the practice of speech is inculated therefore both in school and out. As at Rochester, the pupils are allowed to bring books or papers to the table, and

PUPILS' DINING-ROOM.

the Principal thinks the practice has been beneficial, though it contravenes the canons of good behaviour as generally received.

The school is divided into three departments as at Philadelphia, and the scheme of work pursued is very similar to that of the larger Institution. The first class seen was one of babies under five. It numbered nine in all, of varying nationalities, and had only been half-a-year under instruction. The children had already learned to speak and lip-read the names of a considerable number of objects, etc. School hours of this class are 9 to 11 and 1.30 to 3. The next class, 10 in number, had been 5½ months in the class, but four of them had spent some time in the babies' class of the preceding year. Their vocabulary, all spoken of course, extended to about 400 words. There is no set programme, words being given to the things which interest the children as they arise, but the words learnt are afterwards classified, and at the end of the session a review of the year's work is hektographed, and a copy given to each pupil to take home. This practice is pursued all through the school course, and proves very useful.

The sentence-forms learnt in this class are chiefly cast in the past tense, which is the first tense taught. For developing the idea of past, present and future, calendar work is much relied on, and certainly gives precision to the pupils' knowledge of such terms as to-day, to-morrow, yesterday, etc.

Note may here be made that the style of writing taught in this school is semi-vertical, and came as a welcome relief after witnessing so much poor writing, due to the back-handed effects of the vertical style commonly taught. The writing generally in the American schools was poor, often almost illegible and difficult to read.

In the 2nd year's class of this department, an illustration of the method of story-telling was shown. The story chosen, a simple one suited to the stage of development of this class, was told orally. The children were then required to produce it in writing, or to recite orally what they could remember of it, after which they were questioned upon it. This plan of story telling is also followed in the higher classes—the length of the story and the difficulty of the language being gradually increased. A variation of the method of presenting it to the children is to write it on a cardboard with a rubber pen. The card is hung up in front of the class for a short time—two, three or five minutes—during which they silently peruse it. Then the card is covered and the pupils questioned on what they have read. As a training in concentrating attention and strengthening word memory, this plan has many merits.

The first class seen in the Intermediate Department (3rd school year) was occupied with a geography lesson. The method followed is to begin by making a plan of the class-room, then of the school generally, the grounds, the city, the district, and so on to the county, province and country; the pupils building up their own maps. Picture post cards and the famous Perry pictures are much used for illustrating points outside the pupils' ken. At the end of the session, a copy of the ground covered is given to every pupil and so the teacher of the following year knows exactly what has been done in the preceding year, and what the pupils should be expected to know.

The action work in this stage comprises drill in such sentences as "Miss Dash shook hands with Mary and asked her how she felt, and Mary told her that she was all right." "Miss Dash looked out of the window and asked us what we thought we saw," etc. The action is done, described orally by the child, with help from the teacher when necessary, then written out. Drill on the active and passive forms of the verb is also given at this stage (4th school year), the sentences all based on action work.

As affording material for nature study, a white rat, two turtles, gold fish, a canary, some cocoons and boxes of seeds germinating are kept in this room.

The top class in this department (5th school year) was seen engaged in what is called a word-finding competition. A newspaper called "Current Events" is taken; out of it twenty names of places mentioned in it are selected by the teacher and dictated to the pupils, who are required, as part of the evening study, to find out all they can about them (this presupposes free access to a well-equipped library). Next day, the teacher questions the pupils on the result of their researches. In addition to the value of this practice in accustoming the pupils to search for information for themselves, it is the means of enabling them to accumulate a mass of information on all kinds of topics.

In the teaching of History, which is begun here, the method is to make use of birthdays: Washington's birthday, Lincoln's birthday being made the occasion on which to present the story of Washington or of Lincoln. As the stories grow in number, they are regulated to their places in chronology by means of a century table, thus:—

1700	1800
Washington.	Lincoln.

In Arithmetic, the four processes in money, weights and measures are mastered

In the Grammar or highest department was seen the finished product of the school. The Arithmetic class was doing Algebraic problems, involving equation such as "six times a certain number diminished by 3 times itself =63. What is the number?"

A class in English Literature (numbering 3 only) was studying "Paradise Lost." They gave a resume of English History from Caesar to the Revolution by word of mouth, as rapidly as any hearing class could do. The first class in History was studying the "French Revolution" out of a text book of some 700 pages, the particular lesson on which they were engaged at the time of my visit being the "States General." They manifested an interest and knowledge in political questions which would do credit to any hearing scholars.

The manual training work at the school is chiefly confined to Sloyd wood-work and carpentry. The Sloyd classes are taught by a lady, but the carpentry is taught by a man (almost the only male admitted into this Adamless Eden). A feature of the work in the carpenter's shop which is worth noting in that the big boys are allowed, in the second half of the term, to make things for their own use or to take home with them as presents to their relatives.

There is an excellent gymnasium, a separate building, the teacher of gymnastics both to boys and girls being a lady. The girls excel in the game of basket-ball and gave a team of hearing girls a sound drubbing on the day of my visit.

A number of students are trained at this establishment for the work of teaching the deaf. The course is systematic and thorough and the estimation in which the Clarke Trained Oral Teachers are held in the schools of America proves its value. In fact, the organization and tone of the whole

school is such that residence in it is a stimulus and an inspiration, and though the cost per head is large (about £70 or over), yet in a country where dollars are plentiful, the result is well worth the money expended. In situation, in organization, in all that makes for the healthy development of the deaf child, this institution comes as near to ideal conditions as it is possible for any human institution to approach.

The American School for the Deaf, Hartford, Conn.

Principal, Dr. Job Williams. Number of pupils, about 170. This Institution possesses a special interest in that it is the first public school for the deaf which was opened in America. Its original title, "The American Asylum" for the Deaf and Dumb, suggests some curious reflections. The idea that deaf mutes are little better than lunatics and need the care of an "asylum" is not yet quite banished from the popular mind. On the other hand, the promoters of this enterprise seem to have had little faith in the future of their country if they thought, as the title seems to indicate, that one Institution would suffice for the American continent. Needless to say there have been many startling developments since they opened, with fear and trembling, their little school of 7 pupils in 1817; and great no doubt would be their astonishment could they revisit this mortal sphere and see how great a tree their sapling has grown.

The first Principal of the school was, as everyone knows, the Rev. T. H. Gallaudet—a man of liberal education, broad culture and rare tact. He laid the foundations of what has often been called the American Combined System of Instruction, a system of which his no less distinguished son, Dr. E. M. Gallaudet, is to-day the eloquent exponent. Many modifications, however, have been made from time to time, and it is not easy now to find what is really the American system, so varied and so diverse are the methods employed in the various schools. The old order changeth, giving place to the new in deaf-mute education, as in all mundane affairs.

The method introduced into America by the older Gallaudet was the French system of de l'Epée and Sicard. "The process used in teaching language on this method was a very cumbersome one. The idea to be turned into language was first given by natural signs, next in word-signs, in the order of the words, each word being accompanied by other signs indicating the parts of speech, and giving its grammatical construction. After all this preparation came the written language for the idea." The end sought was to lay up knowledge in the sign language rather than to master the language of the country. The justification for this course of procedure lay in the fact that in those days many of the pupils were allowed to stay only two years at school, and four was thought by many a pretty considerable time for completing their education.

America has travelled far since then, and the American "Asylum" has travelled also. "Massachusetts now allows ten years' schooling to every one of her deaf children, and gives power to the Governor to extend the time beyond that limit in the case of meritorious pupils." This rule holds also in most of the New England States. The "Asylum" has become a "School," and the method, though still combined or eclectic, now places the teaching of writing, speech, lip-reading and manual spelling in the forefront, and relegates signs and the sign-language to a subsidiary place. The school at Hartford now consists of two departments: a Primary, housed in a separate building, which is practically an oral school, and an Advanced Department, located in the old asylum buildings, where the method pursued is in reality

the sign and manual method, plus a certain amount of oral teaching. The work in the oral school follows closely the lines common to all such schools, and calls for no particular comment. The result varies with the aptitude of the pupil and the skill and enthusiasm of the teacher. In the Advanced Department, some very advanced work is done. A seventh year class of nine pupils, of ages varying from thirteen to fifteen, had completed the study of Montgomery's U. S. History, had begun English History, and were studying Freyes' Grammar School Geography and Nichol's No. 4 Arithmetic. The teacher of this class has an ingenious plan for stimulating activity. She keeps a number of interesting books on her desk and allows the pupils who finish their work ahead of the rest to take a book and read. This privilege is highly valued and proves a good stimulant.

In the next highest class the subjects of study are Jenkin's Words and Phrases (an admirable collection of idioms and sentences); English and American Literature Primer; Collier's Junior English History; Nicol's Arithmetic, Book 5; Thirty Poems.

The highest class under Dr. Fay was taking a course of English Literature, a course in Physiology, and Jenkin's Words and Phrases. This class wrote out for me in very creditable English an address which I had made the previous day and which had been "signed" to them by one of the teachers. As it is a matter of some dispute amongst teachers as to how far the deaf understand a discourse which is delivered to them by signs alone, I take this opportunity of saying that the test thus given proved conclusively that the deaf do follow the meaning of what is said to them by signs. The reproduction of my address in written English by this class was quite as good as would have been, say, the report of a Sunday's sermon by an average hearing congregation.

There is a well-equipped trades building attached to this Institution. The sewing class for the girls is in charge of a deaf woman who reads the lips very well. The Sloyd work is taught by a woman teacher; but the cabinet shop is in charge of a man, a skilled artizan, under whose care the pupils turn out some excellent specimens of the cabinetmaker's art.

I have already referred to the many excellent special text-books which have been issued from this school, copies of which were generously given me by the venerable Principal. Chief among them are Miss Sweet's "Lessons in English," which are extensively used in America, and which deserve to be introduced into this country. Though they contain some Americanisms which are not quite agreeable to British ears, yet, till we are in a position to print special reading books of our own, Miss Sweet's lessons would undoubtedly be useful to the class teacher, who finds in the ordinary Standard Readers idioms much too involved for the elementary stages of a school for the deaf.

It is one of the glories of the Hartford school that the quality of its teachers has ever been of a high order. "Twenty-nine graduates of Yale College, besides graduates of other colleges, have been enrolled in its corps of instructors." As one of its reports justly claims—"The high standard set for the country at the beginning, and the endeavour to live up to it, have secured results in the education of deaf mutes which has caused American schools for the deaf to be universally acknowledged to be the best of their kind in the world." That this is no idle boast the records of the past and the quality of the instruction given throughout America to-day abundantly proves.

Conclusion.

My visitation of the American schools terminated here; and, perhaps, it would be wiser if my remarks also were to end. But I feel that my fellow-teachers and others have a right to know exactly what are the conclusions that I have arrived at on certain controverted points. In stating my opinions I lay no claim to infallibility. I only ask those who may disagree with me, or whose mode of procedure I seem to criticise, to believe that mine are honest opinions, frankly expressed, with no thought but of sympathy and admiration for the noble work which is being done all over America, as opportunity offers, by an army of skilled and enthusiastic teachers—men and women whose very enthusiasm it is which occasionally carries them into what appears to a dispassionate observer as extravagence of statement, and sets them into conflict with one another.

The deaf of America have had in the past, and have at the present day, much better opportunities of obtaining good education than have the deaf of our own country. The parent of a deaf child there can claim education and maintenance of his child *as a right*, and that without any haggling with the school board as to whether he shall pay 6d. or 1/—per week for his son's bread and cheese.

The school period is longer, the pupils remain at school till a more mature age, and the schools are better staffed and better equipped than our own. As a consequence, the finished product excels that of our schools in knowledge and culture, though there is this to be said, per contra, that in ability to use the mother tongue for the ordinary purposes of life, there are numbers of deaf mutes in this country who can equal anything that the American schools have produced. Moreover, since the passing of the Blind and Deaf Act, which has made the education of the deaf compulsory in Great Britain, it is well known that we have progressed very greatly, and, as far as I am competent to judge, the work of our best schools now compares not unfavourably, year for year, with the majority of the American ones. But the longer school period and the greater age to which so many remain at school in America, and, above all, the stimulating influence of Gallaudet College, all combine to enable the elite of the American deaf to undertake studies which our deaf mutes in this country scarcely yet dream of.

With regard to systems or methods of instruction, I have to say that the more I see, and the wider my experience, the more I become convinced that it is the teacher who makes the success of a method, and that it is not the dry bones of a method that makes the teacher.

During my tour I saw good work being done on the oral method, on the sign and manual method, on the combined method. I met ex-pupils who had been taught by each and every method, and I found failures and successes alike common to each. If the teacher is skilful and enthusiastic and has good material to work on, he gets good results whether he is an oralist or not. But certain definite principles seem to emerge from what was seen and heard, and these may be briefly and concisely stated.

It is generally conceded now that every deaf child should, as far as possible, learn to speak. There are, it is true, stout opponents of this theory—men who believe and say that the indistinct, harsh and raucous utterance of many deaf people who have been taught orally is useless, and that such would do better to keep an eternal silence and trust for the expression of their ideas to the nimble fingers or the ready note-book. For this latter view I think there is something to be said. Extensive commingling and communing with the adult deaf and dumb has given me considerable insight into their feelings and opinions on this matter, and I think they should have some weight.

But it has also to be admitted by any candid observer that there are many deaf mutes who can be taught, and well taught, by and through speech, and for whom therefore an oral method is to be preferred. My observations have convinced me that, if it is desired to educate a child well on this method, he must live in an oral atmosphere, and no pains must be spared to get him to use his voice the livelong day. The teaching of speech as an accomplishment is, I think, a mistake, at least from the oral point of view, and leads in the end to the complete overpowering of the speech method by the more facile and easy manual method. It follows therefore that, in my judgment, wherever possible, a dual system should obtain, if full justice is to be done to both methods and to all the deaf. Every school of sufficient size to admit of classification should have two departments; an oral, where the "atmosphere" should be one of speech; and a silent, where finger spelling should take the place of speech. Circumstances, such as scarcity of means, may prevent this being done in the schools of our country at present, but that some such arrangement will be the ultimate outcome of the war of systems, I have not the least doubt.

(Signed) W. H. Addison.

Another very interesting and valuable report relative to the deaf was issued last year by James Kerr Love, M.D. Dr. Love is not a teacher, but a physician of high repute, and, being Aurist at the Glasgow Institution for the Deaf, has been greatly interested in this class and has long made a special study of deaf-mute educational methods. Under the auspices of the Carnegie Trust for the Universities of Scotland, set apart for this and similar purposes, he conducted a prolonged and careful investigation into "deaf-mutism" in Europe and America. His object was not only to compare methods, but to study the mental peculiarities and psychological characteristics of the deaf, with the ulterior object of finding out if some system could be devised which, better than any now in use, would overcome some of the difficulties of deaf-mute education. The results of his researches were embodied in a pamphlet entitled "The Study of the Deaf Child." A considerable portion of this is taken up with specific cases and technical details, but his general observations and conclusions are of very unusual interest and value, and worthy of a permanent place in our records, where they may be available to the general public.

DR. KERR LOVE'S REPORT.

A careful outlook on the field of deaf-mute education, as that field is displayed in the chief countries of Europe, in Britain, and in North America, shows some striking phenomena.

In Germany all the deaf are taught to speak—that is, they are taught by the oral method, and no finger-spelling is allowed. In France the oral method is chiefly in use, although thirty or forty years ago nearly every French child was taught by the finger method. In Britain the fate of the deaf child depends much on the part of the country in which he happens to be born—if within the sphere of influence of an oralist, he is taught to speak; if not, he is taught to use his fingers. In America the same state of affairs holds as in Britain. In one district in New York he will be taught to speak; in another, he will learn little but finger-spelling. In Washington he will not learn to speak, in Philadelphia he will.

A glance at the history of the education of the deaf displays the same startling phenomenon. I have noticed the change of practice in France; in Italy the same change has taken place. Fifty years ago there was hardly any oral teaching; now there is hardly anything else. In 1815 Mr. Gallaudet

came from America to Edinburgh to see the oral work of Dr. Watson and Mr. Kinniburgh, and to take back the oral method to the New World; but access to the Edinburgh school was denied him, and Mr. Gallaudet went to France, and took home the finger method. This accident committed the United States to the finger method for over half a century, and at the present time, nearly a century after Gallaudet's journey to Scotland, there is no unanimity in America as to the education of the deaf.

Contact with living teachers, and with the teaching methods of to-day, shows no approach to agreement. Mr. Van Praagh told me that all the deaf, except the idiot and the blind, should be taught by the oral method. Dr. Gallaudet recently took me over the Kendall School and Gallaudet College at Washington, and I saw hardly any evidence that oral teaching existed in that city.

Mr. Henderson, the Glasgow missionary to the adult deaf, told me of several local deaf-mutes on whose oral education by private tuition large sums had been spent, but who in the end took refuge in finger-spelling. On the other hand, I have met deaf-mutes who never had the advantage of private tuition, but who spoke distinctly, and lip-read with scarcely an error.

Now, it is not the teacher of the deaf who is at fault. Many teachers, it is true, are so full of their method that they cannot see the deaf child for their method. Teachers have divided themselves into opposing camps of oralists and manualists, and, until this opposition ceases, the deaf child must suffer. But I have probably visited more schools for the deaf than any living medical man, and I have met no more devoted, patient, and laborious set of women and men than the teachers of the deaf.

Nor is it the systems of education, as such, that are at fault. I doubt very much whether either the methods by hand-spelling or by speech and lip-reading will ever be much improved, and I feel sure that we have already far too many combinations of these. Further, I doubt very much whether there is any less satisfactory and more disappointing chapter in the history of education than that in which teachers advocate the claims of the special methods of education which they recommend. Neither are there any differences in the deaf themselves to explain the differences in the practices of their educators. The causes of deafness, and the degrees of it, are the same in Germany as in America, the same in Britain as in France. Geographical distribution, except within the very narrowest limits, makes no difference. Nor does time alter the incidence of the deafness which produces dumbness. Except, again, within the narrowest limits, the causes of deaf-mutism are the same from one decade to another.

How, then, comes this apparently accidental management of the education of the deaf? Why should what is universally practised in Berlin be almost as universally ignored in Washington, and why should what is right in 1856 in Paris be wrong in 1906? Why, in a single question, have teachers of the deaf divided themselves into two opposing camps for two or three hundred years, and why is there now no real progress towards unanimity? *Because the deaf have been, and still are, regarded as a homogeneous class, which they are not.* They are brought together into large buildings and taught by a single method, when no one method can be successfully applied to them.

This statement applies to the oral and hand alphabet methods alike, and it applies with less force, but over a larger area, to what is known as the combined method. In an oral school, at least the semi-deaf and the brighter among the totally deaf will get justice. In a hand alphabet school, the totally deaf for the most part get justice, though the semi-deaf and the brighter

among the totally deaf suffer; but in a combined school the best is done for neither class. I think, therefore, the combined method does not supply the solution of the problem connected with the education of the deaf.

I am convinced that the motto of the future must be, *Forget the system, study the deaf child.* The deaf child, gentlemen, always the deaf child. Make an inventory of his faculties. Measure his hearing, and use what remains to the utmost. If he has any speech, save it for him as the most precious of his possessions. Test his eyesight and correct its faults. If you do not expect a deaf boy to hear you, do not expect a blind boy to read your lips. Get at his family history. Do not look for a brilliant pupil of any kind from a badly tainted fraternity. If he was born hearing, get at the cause of his subsequent deafness. Do not expect a boy who has suffered from meningitis to become a brilliant language pupil. Examine his nose and throat. Do not expect a deaf boy with abundant adenoid growths to speak well; a hearing boy with the same obstruction speaks badly. If the boy is in bad general health, improve that. You cannot expect a hungry, rickety child from the East-End of Glasgow to become at once a brilliant pupil by any method. If you will give me answers to half a dozen questions such as the above, I will tell you in most cases by what method *the child should be educated. But the method must wait on the child, not the child on the method. The deaf child first, always the deaf child first.*

After what I have said about the deaf child, you will not expect me to be the advocate of any one system of educating the deaf. The student of the deaf child, as I have outlined him, will never magnify his system. After wandering about the world among oralists and finger-spellers, watching the work of both, and listening to the criticisms of each on the other, he is apt to exclaim, "A plague on both your houses," and his only refuge is in the deaf child. The two systems which these gentlemen represent are excellent as systems, so excellent and so complete that I regard them as finished products. I doubt if any more accurate, more efficient, and more rapid means of communication will ever be used by the deaf who cannot be taught to speak than our present hand alphabets. And, again, I doubt if the oral method of teaching the deaf, as at present used in certain schools in Germany and America, will ever be much improved upon. Hence, I assert *that further progress in the education of the deaf-mute depends not on the study of methods of education, but on a study of the deaf themselves, a study which will give a scientific classification, and which will enable existing methods to be applied with greater efficiency.* This statement leads me to divide this enquiry into two parts:

1. How are the deaf taught at present in the most progressive countries in the world?

2. What does a study of the deaf child point to as the best classification?

I proceed now to answer the first of these questions. I will take the schools of Germany and America as representing the advance guard of deaf-mute education or rather educational systems. The German plan of teaching the deaf by the universal application of the oral method is like the fitting of all kinds of sight defects with one type of eye-glass. In a school like that at Frankfurt where the pupils are picked, where no weak ones are admitted, and where money is lavishly spent in the getting of good results, it is a success. In a school like that at Dresden, one of the largest in Germany, a fifth of the whole are regarded as weak, and are allowed natural signs to help the oral method. In nearly every institution in Germany, teachers may be met who find a portion of their pupils so dull that they either use signs to help their pupils, or admit that they would like to do so. The

adult deaf of Germany, like the adult deaf elsewhere, sign a good deal among themselves. I am not speaking of finger-spelling, of which there is none in Germany, but of mimic gestures, without which the teaching of many of the deaf is unspeakably laborious and sometimes impossible. Germany may never leave the oral system, but I feel sure that with regard to the duller of her deaf children, some departure from pure oralism will be taken. In Berlin many of the semi-deaf are sent to the board schools, where special arrangements are made for them, so that the number of this class in the institutions for the deaf in that city is less than half what it is elsewhere. Were this done all over Germany and were special classes for the semi-deaf created in all hearing schools, I think the oral system would have but poor results to show in Germany, for there, as elsewhere, the oral system has most of its successes amongst those who have a good deal of remaining hearing and speech. Oralism and the German system have been so long and so closely associated that for a long time in almost all minds, and still in many minds, the two rank synonymously. And Germany stands so thoroughly committed to oralism that, although most of the arguments for a more scientific classification are based on the work of her clinical observers, she will, I think, be the last of the great countries to educate her deaf rationally. But in time, even in Germany, the mist of systems will fall from her eyes and she will behold "the deaf child."

In America things are different. There is no American system of educating the deaf. By an accident the finger-spelling or manual alphabet system got the start. But perhaps the accident happens less than it seems. Had the oral system been introduced in 1815, and had it been as rigidly applied as in Germany, I believe the receptive and thorough American would have cast it off before now, and the visitor would have found in the United States very much what I found in the early summer of this year, viz., opposing systems so highly walled-in that it is only now and then one can get a glimpse of the deaf child. The deaf child has never been studied in America as I have outlined his study; but he is being experimented with on a colossal scale. More money is being spent on him than in any country in the world, and, although not the shortest, nor the cheapest, nor in any sense the best way, this is one way of getting at the truth—and the Americans will get at the truth whatever it costs. Already classification of a kind begins to show itself in the larger institutions. At Mount Airy, Philadelphia, an oral school with over five hundred pupils, 6 per cent. are admittedly oral failures and are treated by a separate method. At Washington Heights, New York, a combined school, also with over five hundred pupils, separate classes exist for the semi-deaf, who are taught exclusively by the oral method. Both institutions are under the care of very able men.

Comparing the oral with the combined schools of the United States, I found that the best results and the most intelligent pupils were the product of oral teaching. I think the orally taught deaf of the United States are the best taught deaf in the world. I am referring to the finished product, when the child leaves the institution, and I am referring to general intelligence and fitness for the work of life. At Northampton, one of the best of the American oral schools, it is held that at any stage of the deaf child's education the orally taught is in advance, intellectually, of the manually taught or those taught by the combined system. I think the attention required in the early years for acquiring articulation may delay the child's general progress for a time, but after the fifth school year the oralist is abreast of the manually taught, and during the remaining years he slowly forges ahead, until, at the end of his school career, the American orally taught child is the best taught

deaf child in the world. The school career of the American child is longer than that of the German. The latter is eight years, the former ten or twelve years. These extra school years give the American deaf these advantages:

1. He leaves school when his education has brought him more nearly in line with his hearing fellows.

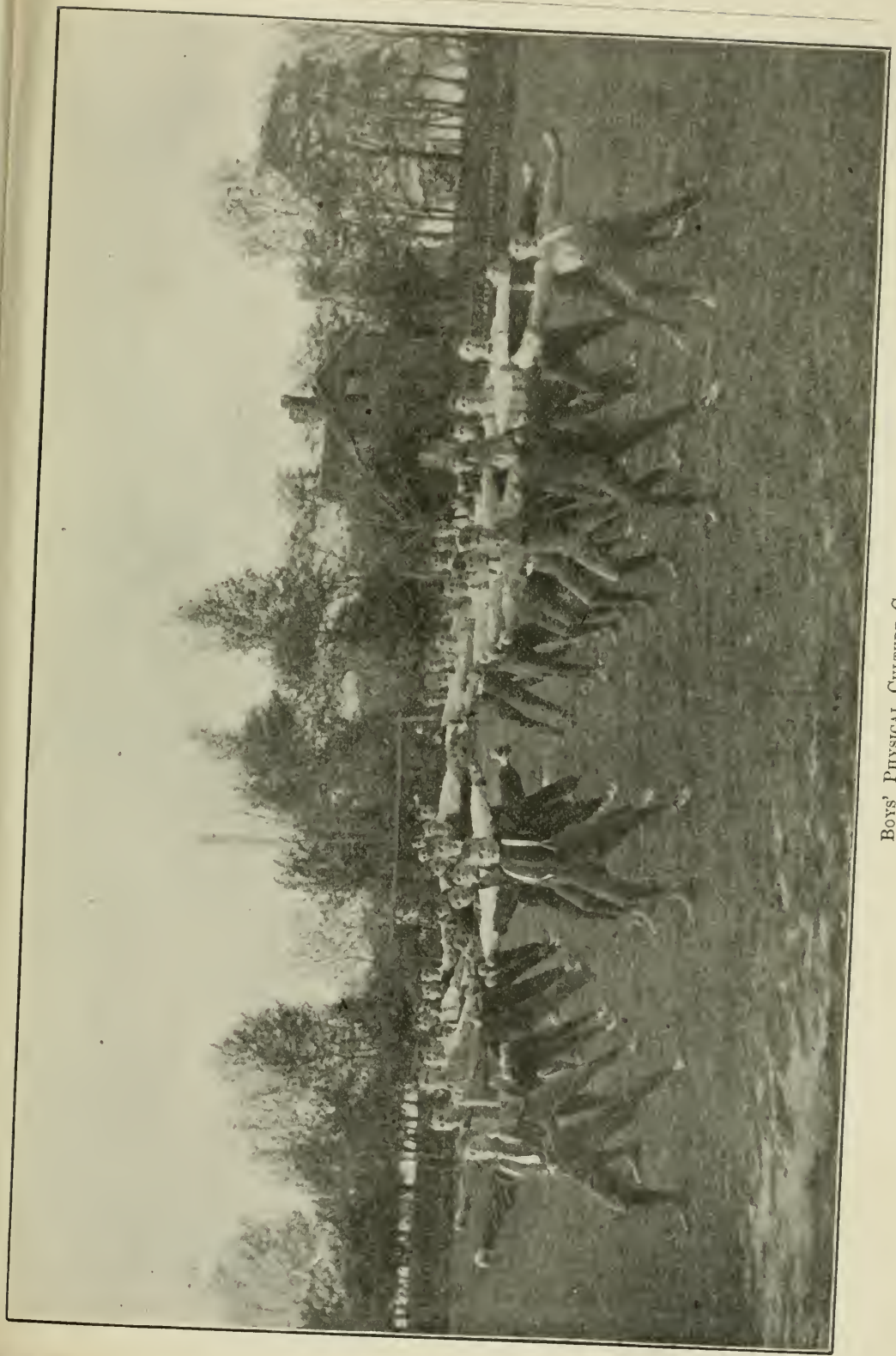
2. During the later years he has carried on, in addition to his intellectual development, a thorough training in some trade, for the larger American schools are fully equipped with trade departments.

3. As Mr. Nelson, of Manchester, has pointed out, these additional years spent in school, say till the age of 18 or 20, are important in another respect. In Britain when the lad leaves school, say at 15 or 16, "he meets with bad companions, unsympathetic benchmates, and his spare time is filled up in a vacant and unprofitable way. Under the American plan this difficult time is bridged over, and when a young man leaves the gates of the school, he goes out self-reliant and well fitted in every way to take his part as a citizen of the world."

In America at present there is a tendency not only to keep the youth at school late into life, but to take the child in hand very early. This may be seen in Boston, under Miss Fuller, but on a larger scale at Bala, near Philadelphia, under Miss Garrett. This lady, who carries on her late sister's work with great enthusiasm and ability, does not believe in the institutional plan of educating the deaf. Her own school is a residential one, it is true, but she regards it as a substitute for bad homes. From these homes she takes the children at 4, 3, or even 2 years of age, and keeps them continually under her care, even during the summer vacation, till they are able to enter the ordinary hearing schools, say six or eight years later. The education is purely oral. About Miss Garrett's success while the children are with her I have no doubt, but I doubt much the wisdom of handing such seriously handicapped children over to the ordinary schools for the hearing, and there is a good deal of difference of opinion amongst American teachers as to the results of this step.

At the other end of the deaf child's educational life, America has been conducting for many years another great experiment, in the shape of Gallaudet College, Washington, where the deaf youth or young woman may take a university course, and graduate like hearing men and women. Now Gallaudet College has shown that the brightest among the deaf are capable of high intellectual and scientific attainment, but I do not think other colleges of this sort should be founded throughout the world. Descriptive lectures are not of great value in the universities of the country, and there is no reason why the intellectual deaf should not attend the ordinary universities. Into the practical courses of these institutions they could easily enter, whilst tutorial classes for their help could easily be attached to the ordinary lecture courses. Some of the deaf in the United States actually attend the ordinary universities.

But is there no country on either side of the Atlantic where systems are subordinated to the deaf child himself, and where teaching based on a scientific classification is carried on? Fortunately there are two small states in Europe which are in advance of all the world in this matter, and from which I believe much may be learned. These are Denmark and its neighbor, Schleswig-Holstein, once a part of itself. In Denmark the deaf are classified on the basis of remaining hearing, in Schleswig on the basis of intelligence. These classifications differ less than they seem, for I will have to show you that, with certain exceptions, which find their counterparts amongst hearing children, they are nearly identical; in other words the



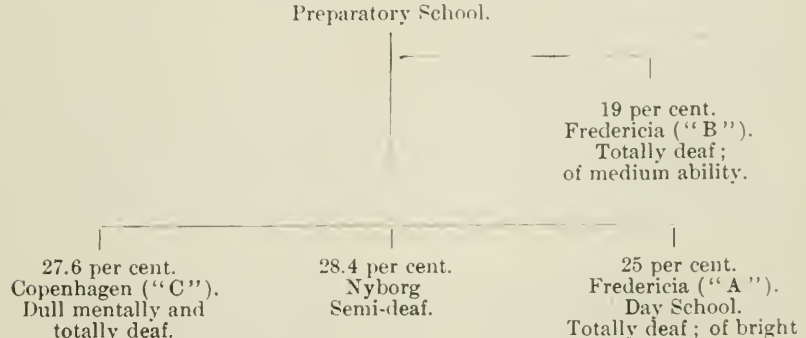
Boys' Physical Culture Class.

most intelligent among the deaf are those with remaining hearing and speech. The Danish and Schleswig systems find themselves at one in this, that while they educate some of the deaf on the oral system they recognize that a large number should not be so educated, and frankly consign these to separate schools, where pure oralism is not attempted. The teaching of the deaf in Schleswig and Denmark is, therefore, worth a little detailed study.

Denmark is a small country, with a population of a little over two millions, and a deaf-mute ratio of about 1 to 1,600 of her population. At present the deaf population of school age numbers about 334, and the arrangement for the education of these children is as follows:— All deaf children are sent, to begin with, to Fredericia, in the south of Jutland or West Denmark, where they enter a preparatory school. At the end of a year those who have any considerable remaining hearing, that is, those who hear vowels, are removed to Nyborg, a town on the island of Funen or Middle Denmark, where they attend a day school and are educated by the oral method. No distinction is made between the dull and bright amongst these semi-deaf children. Most of them are bright children, but there are some dull children amongst the semi-deaf, as there are amongst hearing children. Only totally deaf children are now left at Fredericia, and at the end of the second year these are again reviewed, and the dull amongst them are taken from the preparatory school and sent to Copenhagen, the capital of Denmark, situated in the east of the country. In Copenhagen these totally deaf children of dull intellect are taught by finger spelling, and no time is spent on oral training. This is the essence of the Danish system, and it seems to me to recognize the first great fact which emerges from a study of the deaf child. *It is not worth while trying to educate by the oral method a mentally dull child who is totally deaf.*

The mentally dull and totally deaf children of Denmark are called the "C" children. At Fredericia two classes are left, designated "A" and "B" respectively, but both totally deaf. The distinction between them is on the basis of mentality, the "A" class being the brighter. Some of those are brighter than some of the semi-deaf at Nyborg. They are educated at a day school at a distance from the preparatory school, by the oral method, and care is taken that this oral training is encouraged at the homes at which they board. The "B" children—the totally deaf of medium mentality—remain in the preparatory school where they are also taught orally. A diagram with accompanying percentages will make these arrangements clear.

DISTRIBUTION OF SCHOOLS FOR THE DEAF IN DENMARK.



The actual figures for the spring of 1905, and the corresponding percentages, were as follows:—

Preparatory School at Fredericia			70	pupils (unclassified).	
"A"	"	"	66	"	or 25 per cent.
"B"	"	"	50	"	" 19 "
"C"	"	Copenhagen	73	"	" 27.6 "
Semi-deaf	"	Nyborg	75	"	" 28.4 "
			100	"	

The Danish system of educating the deaf, or rather of classifying the deaf for educational purposes, is in my opinion, too complicated, and may be faulty in some of its details. For instance, I see no reason why the "A" children of Fredericia should not go along with the semi-deaf of Nyborg into one oral day school or residential institution. Both are taught by the oral system so thoroughly that they keep up their speech in adult life. Nor do I see why the "B" children of Fredericia should not go along with the "C" children of Copenhagen. Both occupy residential institutions, and I fear many of these "B" children never make oral successes. This would reduce the Danish schools from five to two, for the preparatory school might be a division of the oral school. But I heartily agree with Mr. Addison when he says that "in this small but progressive country of Denmark, we found the most thorough organization for dealing with the problem of deaf-mute education on a scientific basis."

Let us see, now, how the Schleswiger deals with the difficult problem. Schleswig is smaller than Denmark, has a population of about a million and a quarter, and last year there were 132 children under instruction in the schools, of which there are two, both in the town of Schleswig. The Schleswigers do not separate the totally deaf from the semi-deaf like the Danes, but the proportion of the latter is almost the same as in Denmark, viz., 30 per cent. The Schleswigers classify their deaf on the basis of mental brightness, or, as the Americans say, on the basis of mentality. All the children go to a preparatory school. After two years, the dullest, now called the "C" class, are set aside. It is not necessary to remove them from the preparatory school, for all teaching is by the oral method as in Germany, but these "C" children are allowed the help of free signing in their education. The brighter children, now classed as "A" and "B", are removed to a well appointed day school, about a mile and a half from the preparatory institution, and taught by the oral method. The basis of classification is mentality, not remaining hearing, but the day school contains a much larger proportion of the semi-deaf than the residential institution. The Schleswig system of classification is faulty, in that it takes too little notice of the semi-deaf, and it insists on the oral training of all the deaf, however dull in intellect.

Even were the accommodation for the deaf children of Glasgow ample, I should press on you some modification of the present arrangements. I am the more encouraged to do so because the accommodation is not sufficient, and because I see an opportunity which rarely arises in the history of any institution. I believe it is in your power to establish one of the most efficient centres for the education of the deaf in the world. This would be done by a combination of the Danish classification with American thoroughness.

All the deaf should pass through a preparatory school, where for one or at most two years they should have a chance of education by the oral method. This school should be able to accommodate from thirty to forty

pupils, and may either be near the present institution or form part of a new oral school. In this preparatory school a scientific inventory of all the faculties of every deaf child would be made. Such a scientific study, together with the experience of the teacher of these children would enable the first great step in the classification to be taken, viz., *the separation of those who are likely to be worth training orally from those who should not be so trained.* The former would consist of almost the whole of the semi-deaf and the brightest of the totally deaf, or, referring to the Danish classification, the Nyborg children *plus* the "A" children of Fredericia. A few of these semi-deaf children might be dull children with bad memories, but if their speech be good they should still be kept in the oral school. The semi-deaf and "A" children should now be removed to a new oral school built at a distance from the present institution. The rest of the children would remain at the present institution, where they should be taught by a finger-spelling or a combined method. They would be known as the "B" children of the Glasgow school.

The semi-deaf and the "A" children would form about 40 per cent. of the whole with the present eight years' school course. So much for the European or Danish Schleswig part of the new Glasgow system. Now for the American part. The school course should be extended from eight to ten or twelve years, and the last part of the course, say the last four years, should be half intellectual and half trades in its arrangement. Many of the apparently intellectually dull would have their intelligence awakened by the application of their hands, and those who continued this extended course would leave the institution fit for their several places in life, and would, like many of the American deaf, make a place for themselves in society such as the British deaf-mute seldom does. Were the school course extended to ten or twelve years, I think the oral school would contain a majority of the pupils.

The study of the deaf child acquires an additional interest and importance at the present time, because in the English Education Bill now before Parliament a clause has been introduced which involves the medical examination of all school children entering the elementary schools, and there is little doubt that such examination will be carried out in Scottish schools at an early date. It should be gratifying to you to know that your institution has led the way in this matter in Britain, for such an examination of your children has been conducted already for fifteen years. I advise you, however, to appoint an eye surgeon to examine the eyes of the children on admission, as some children progress slowly because of remediable defects of sight. I found this carried out at some of the American institutions.

Of course, the cost of education of the deaf would be greater than at present. America spends nearly twice as much on her deaf as we in Glasgow do, and Germany at least a third more. Denmark, like Germany, spends nearly a third more than we do on the education of her deaf. Canada spends £43 per head on her deaf children, much more than we in Glasgow do. (The Glasgow rate at present is about £35 per head per annum). But both the community and the State would gain in the long run, for the deaf would be more self-supporting, or rather, more of them would be self-supporting, and a larger number of them would be restored to the society of the hearing.

You must have noticed that I have had much to say of the semi-deaf and semi-mute, those with some hearing and speech; that, indeed, I have been pleading for the salvage of these lost faculties. Wherever you have

bright pupils in a large class, most of the bright ones are the semi-deaf and semi-mute. In the highest classes of all institutions, amongst the children who have been found fit for the most intellectual work, the proportion of the semi-deaf and semi-mute is larger than in the lower classes. The importance of remaining speech and hearing then can hardly be exaggerated, and these can never be too assiduously cultivated.

The Danish system, I said, recognized the fact that it is not worth while trying to educate a mentally dull child, who is totally deaf, by the oral method. The Danes have 27.6 per cent. of these. We and they alike have about the same number of semi-deaf and semi-mute, and I would put as a statement of the second great fact which emerges from this study, this—*The semi-deaf and semi-mute, which form about a fourth part of the deaf children of all countries, should be taught by the oral method alone, and only in a few cases will this fail to give satisfactory results.* To continue longer to educate these semi-deaf children by a finger-spelling or combined method would be a grave mistake. The new school which I would found would contain, whoever else, these semi-deaf and semi-mute children, and on its corner stone there might well be engraved, "Speech for the semi-deaf."

Speech is like a beautiful building. Silently, with never a whisper from the growing child, its foundations are laid. But the sound of his mother-voice is ringing in his ears and the words he has heard a hundred times he soon tries to produce. The delighted mother erects a scaffolding of signs and gestures to help the efforts of the child. Slowly but gracefully rises a building, pillar and capital, tracery and moulding being added, till a spire appears at the top which points to Heaven. So it is in this building up of human speech. The rough, uncouth syllables are hewn into more beautiful form by the tender mother, every encouragement is given to the efforts of the child till words become sentences. Broken and but half understood at first, words have to be supplemented by signs and assisted by gestures, and so valuable are such signs and gestures, that throughout adult life most speech which is worth listening to or which the speaker wishes to be more than usually effective, is freely adorned with them. But in the hearing child they are no permanent part of the structure. Like the scaffolding they are soon done away with, and the speech of the child grows, word on syllable, sentence on word, premiss on sentence, and conclusion on premiss, till a structure arises which is one of the few possessions man does not share with the lower creation, and which is the ladder by which his thought is led to God.

In the deaf child the process of speech building is more laborious and the result is never so beautiful. But it is nevertheless the unquestionable right of the deaf child to have the effort made for him, and at least in the case of the semi-deaf and semi-mute the effort will usually succeed. Every scrap of hearing should be used, every vestige of speech saved. The scaffolding of signs and gestures may have to be reduced to a system and kept up for a longer period, but the building itself must be of words and sentences which must be spoken as well as may be. As soon as expedient the scaffolding of signs and gestures must be removed, if the speech of the deaf or even of the semi-deaf is to be worth anything, and although, as in the repairing of the building to which I have likened it, the scaffolding may have to be re-erected from time to time, it must be no part of the permanent structure and must only be used in times of stress or disaster.

Nearly five hundred years ago Donatello, the greatest of the early Tuscan sculptors, lived at Florence. All Florence had flocked to his studio to

see his St. George, the masterpiece of this great artist. Princes, dukes, lovely ladies, vied with each other in praising the work. One day a student stood with fixed eyes and folded hands before the St. George. He walked from one position to another, measured it with his keen glances from head to foot, regarded it before, behind, and studied its profiles from various points. The venerable Donatello saw him, and awaited his long and absorbed examination with the flattered pride of an artist and the affectionate indulgence of a father. At length Michael Angelo, for that was the student's name stopped once more before it, drew a long breath, and broke the profound silence: "It wants only one thing," muttered the gifted boy. Years passed on; Donatello knew the mighty genius of Michael Angelo. The young artist had gone to Rome, and the old man lay on his dying bed in Florence. "But one thing;" amidst the murmur of applause which fell on his ear from all sides there came the whisper, "It wants only one thing," "What can it be?" Michael Angelo was sent for.

"I am going, Michael; my chisel is idle,my vision is dim; but I feel thy hand, my noble boy, and I hear thy kind breast sob. I glory in thy renown. I predicted it, and I bless my Creator that I have lived to see it; but before I sink into the tomb, I charge thee, on thy friendship, on thy religion, answer my question truly."

"As I am a man, I will."

"Then, tell me, without equivocation, what it is my St. George wants."

"The gift of speech," was the reply.

A gleam of sunshine fell across the old man's face. The smile lingered on his lips long after he lay as cold as the marble upon which he had so often stamped his genius.

Gentlemen, to this statue, which remains the admiration of posterity, no human power could give the gift of speech; but it is given to us to confer on many a deaf child this great gift, and until we have done so to as many of the deaf as are capable of receiving it, we have fallen short in our duty.

The following were the German schools visited by Mr. Addison and myself during the early summer of 1904:—

Frankfort-on-Main (Director Vatter.—A large well-appointed school of forty pupils. No weak pupils admitted. The method is "pure oral" in almost the literal sense. The school course is eight years. There are no day scholars, all being resident. About 27 per cent. are semi-deaf, but no acoustic training is given. Certainly no aids to hearing should be used here, for Vatter has the voice of a lion. The speech and lip-reading are both very good. The cost per head is £50 to £55 per annum.

Munich Institution (Director Köller).—One hundred pupils. There are twelve day scholars here, the rest are residential. Twenty per cent. are semi-deaf, and are taught by a special method, by which the pupil watches the lips of the teacher in a mirror whilst the words are spoken loudly in his ear. This produces excellent speech and lip-reading in these semi-deaf children. The Director would, if possible, have a separate school for these semi-deaf children, as they are influenced for the worse by association with the totally deaf. He thinks the mirror method improves the intelligence of dull pupils. Except among the semi-deaf, the speech in this school is not specially good, and a good deal of gesticulation goes on. The Director thinks the speech of the pupils improves after they leave schools, unless where they congregate in unions in large towns. In the country, where they are compelled to mix with the hearing, speech and language improve in after life. Professor Bezold carries out very careful testing of the hearing power in this school.

Vienna Royal Institution (Director Fink).—Eighty-three pupils, eighteen of whom are day scholars. Twenty-five to thirty per cent. are semi-deaf or have vowel hearing. In the school these semi-deaf and semi-mute children are easily picked out by their good speech and intonation. Both the children and the teachers sign a good deal in the school-room. The school course, as elsewhere in Germany and Austria, is eight years, and the cost per head is £40 per annum and over.

Vienna Jews' School (Director Brunner).—One hundred pupils, twenty-five of whom are semi-deaf and semi-mute. Here, again, the speech of these latter is much better than that of the rest of the school. Remaining hearing is exercised by Urbanischitsch's "Harmonica," with the result that hearing, or at least appreciation of sound, improves.

Wiener Neustadt.—Seventy-eight pupils. Here, again, Urbanischitsch's "Harmonica" is used to improve the hearing of the semi-deaf. A nurse treats the actively diseased ears. The building is situated in the country, and is new and very well appointed. The cost per head is £37 per annum.

Dresden Institution (Director Stötzner).—Two hundred and thirty pupils, 33 per cent. of whom hear vowels and words. Within one building the pupils are classified in "A," "B" and "C" classes. The "C" class is composed of weak-minded children, and comprises about a fifth of the whole school. The proportion of the semi-mute and semi-deaf is much higher in the "A" classes. The Director thinks all but the "C" children can be educated orally. The cost per head is £42 10s. per annum. The Director thinks his school is too large, and would favour smaller buildings.

Berlin Royal Institution (Director Walther).—Eighty-six pupils, with only 10 per cent. of semi-deaf, because in Berlin most of these attend special classes in the hearing schools. On the whole, the speech and lip-reading here are poor, and the intonation of the voice is poor. The highest class, however, has good speech, and the children in it are very intelligent, though only two or three members in it have well intoned voices. M. Ferrari, of Sienna, a well known Italian teacher, was visiting this school when we were in Berlin. Ferrari has recently seen the schools of the United States. He holds that the pure oral system is the best, and that language develops as far under it as under the finger or any combined method.

Hamburg Institution (Director Sodor).—One hundred pupils, about half of whom are day scholars.

The Danish system or plan of educating the deaf has been discussed so fully that any details with regard to individual schools is here unnecessary. The visit to these schools and to those of Schleswig were paid in May, 1905. A word here as to the history of deaf-mute education in Denmark may be valuable, as it shows how the Danish classification came about. In 1787 Pfingsten, a peruke maker and musician, commenced a small private school for the deaf in Lubeck. Later this was transferred to Schleswig. About a hundred years ago Dr. Castberg was deputed by the Danish Government to visit the chief schools in Europe and report. He spent a long time at the Paris Institution, and on his return the Royal Institution at Copenhagen was founded, and the method adopted was finger-spelling and writing. This was in 1807.

It was not till 1850 that an oral school was founded in Copenhagen. It was founded for the uncongenitally deaf (the semi-mute and semi-deaf). In 1881 these two Copenhagen schools were found insufficient for the accommodation of the deaf children of Denmark. A new Royal Institution was therefore built at Fredericia, under Mr. Jorgensen, which was afterwards removed by the State to Nyborg, and thus the present distribution of schools in Denmark was completed. The present head of the Nyborg school

is Mr. Forchhammer, perhaps the most scientifically-minded teacher of the deaf I have met in any country. Quite lately I wrote Mr. Forchhammer regarding certain points in the Danish system or plan of education, and as I have said so much in favour of Danish classification I think it is worth while reproducing his reply:

DEN. KGL. DOVSTUMMESKOLE,
NYBORG, 7th August, 1906.

DEAR DR. LOVE,—It is a pleasure to me to answer your questions concerning the instruction of the deaf in Denmark.

1. The cost per capita per annum is slightly different in the various schools in our country. It averages, however, at about £45 at the present moment. It has been constantly increasing.

2. There has been compulsory education of the deaf in Denmark since 1818, after the child has reached its eighth birthday. The school time is eight years.

3. A private oral school (Prof. J. Keller's) made, in 1860, an agreement with the Government to accommodate a certain number of State pupils, mostly semi-deaf-mute, who were to be taught orally, as that method would be more beneficial to that class, instead of placing them in the Royal Institution in Copenhagen, which used manual methods exclusively. This institution proving later to be too small to accommodate all deaf pupils of school age in the country, the Government erected a new institution in Fredericia, where Prof. G. Jorgensen became principal, and the best part amongst the congenitally deaf were placed there and taught orally. This institution was opened in 1881, and was enlarged ten years later, when the Ministry for Public Instruction resolved that two-thirds of the congenitally deaf—the best and medium gifted children—ought to be educated orally (as the result with the best of the congenitally deaf had proved very satisfactory). After that time it is only the less intelligent (one-third) part of the congenitally deaf that is sent to the Copenhagen institution and educated manually. Keller's private school was transferred to Nyborg in 1891, and became from that time a State institution, and all the semi-deaf-mute continued to be placed there.

4. It may be said that almost all our former pupils use their speech as the essential means of communication with those around them, which statement is also corroborated through the answers in blanks, which are filled by the parochial clergymen in all towns outside Copenhagen and returned to the deaf schools annually. There may be some few instances where a former pupil supplants (supplements?) his or her ineffective speech with signs, if constantly living among others educated after the silent method; however, such instances are almost unknown.

5. We have (at Nyborg) several pupils we wanted to place in a special department for slow or feeble-minded deaf, if such was at hand. But they ought to be taught orally also in such a department for backward deaf children, owing to their generally having a considerable amount of hearing. Our wish here is that we could classify our semi-deaf and semi-mute, and have two parallel groups—"A" class and "B" class—similar to what is practised with the congenitally deaf.

With kind regards, yours sincerely,
G. FORCHHAMMER.

Dr. J. Kerr Love, Olrig, Polloshields, Glasgow.

The following American schools were visited by the writer during May, 1906:—

Pennsylvania Institution, Mount Airy, Philadelphia (Principal, Dr. Crouter).—Five hundred and ten pupils. Here the system of education is oral in 94 per cent., only 6 per cent. being regarded as unfit for oral training. The general intelligence of the school is very high. The speech of the semi-mute and semi-deaf is very good, and the lip-reading of the school is very good. The children are bright and anxious to talk. The speech of the totally deaf is also good, but of course their voices are not so well intoned as those of the semi-deaf. Many of the deaf-born are very bright and intelligent. The school course is ten to twelve years. The cost per head is £60 per annum. The trades department is the best I have seen anywhere and is probably the best in the world. Here are some of the items of work done by the pupils in the year 1905. The class in baking made all the bread consumed, some 120,000 lbs., all the buns and biscuits, and all the plain and fancy cakes. The class in plastering and stonework repaired the ceilings and walls in various parts of the buildings, built two large closets, rebuilt a culvert and retaining walls of the stone bridge on the main drive, etc. The class in woodwork wainscotted several large rooms and a hallway, refitted the shoe-shop, made a number of closets, bookcases, large chairs and settees, laid flooring, put up partitions, brackets, or steel ceilings in various parts of the buildings. The classes in tailoring, dressmaking, and shoemaking attended to the usual sewing of the household and provided all the shoes required for the usual year's wear.

Home for the Training in Speech of Deaf Children before they are of School Age, Bala, Philadelphia. (Principal, Miss Garrett).—Sixty-two pupils. Deaf-mute children are usually of poor parentage, and no attempt is made to begin their education till they enter the institutions at 6 or 7 years old. Between the ages of 2 and 7 the hearing child is rapidly developing, the deaf child is at a standstill, and I have shown that as a consequence the deaf child's head is smaller than the head of the hearing child. This school takes the child at 2 or 3 years, and educates him by the oral method till he is able to enter the schools for the hearing. It must, therefore, be considered apart and not compared with other American schools. I found the children very anxious to talk to me; they spoke and lip-read very well. Altogether, I thought Miss Garrett's work admirable. I think it is sure to be copied in other countries.

Gallaudet College, Washington, D.C. (Principal, Dr. Gallaudet).—One hundred students. This is really a university for the deaf, and its students are the best from the deaf schools in America. The College grants degrees, and has demonstrated that many of the deaf are capable of high intellectual work. The combined method is followed here, but there is very little oral training carried on. In America, where both systems exist side by side, the one college which exists must, of course, use the combined method. Some of the orally taught deaf of America go to the ordinary universities. I should rather see special arrangements made at the existing universities of our own country than see colleges for the education of the deaf founded.

Kendal School for the Deaf, Washington, D.C.—Fifty pupils. Contiguous to Gallaudet College, and under the care of Principal Gallaudet. There is hardly any oral training in this school, and I saw no proof that the school produced either specially intelligent or particularly good language pupils. The classes are small.

GIRLS' PHYSICAL CULTURE CLASS.

Belleville Institution, Ontario, Canada (Principal Mathison).—Two hundred and fifteen pupils. This is a "combined" school, and but little oral work is attempted. The course is seven to eight years. Canada is peculiarly fitted for the deaf-mute. It is labour which is wanted there more than anything else, and, during the short school course existing at Belleville, it is possible to make the deaf child fit to earn a living with a certainty not known in Britain. The school course is too short for anything but the production of wage-earners, and the classes are too large. But the Principal accomplishes his avowed object, viz., to make his deaf children earn a living in a country where labour is plentiful and workmen scarce. Aside from the question of system, the school is one of the best managed on either side of the Atlantic. The cost per head is £43 per annum.

Horace Mann School, Boston (Principal, Miss Fuller).—This is a day school of one hundred and fifty pupils. This is a school for the semi-deaf and semi-mute to a larger extent than any I have seen. Many of the pupils have been at "hearing" schools and have come to this school afterwards. The general intelligence of the children is good, and, at least in the higher classes, the speech and lip-reading are good. At a small school, near Boston, young children are boarded in a family home, and taught after the manner adopted by Miss Garrett. A few day scholars also attend this school.

Clarke School for the Deaf, Northampton, Massachusetts (Principal, Miss Yale).—One hundred and fifty pupils. This is a typical oral school. The course is ten to twelve years, and some of the pupils go to the universities for the hearing. None go to Gallaudet College. The speech and lip-reading right through the school are good. The intelligence in the primary department is good; in the intermediary department, a little disappointing; but in the highest or grammar department, again, very good. I thought I detected in the intermediary department the effect of pure oral training in the form of a lagging behind of the general intelligence, but after the sixth school year this had disappeared, and in the highest classes I was favorably impressed with the ultimate effect of oralism. Here, as elsewhere, the semi-deaf are easily picked out, and the proportion of them increases as one gets to the highest classes. The cost per head is £60 per annum.

Washington Heights Institution, New York (Principal Currier).—Five hundred and eight pupils. This is a "combined" school, but the Principal describes himself as an "eclectic," and the school is one in which a classification is carried out to some extent, viz., some of the semi-deaf and semi-mute are in separate classes, and are taught by the oral method alone. The Principal thinks all the semi-deaf and semi-mute, however dull in intellect, should be taught orally. He advocates the practice of speech also on hygienic grounds, and believes that speech by the deaf diminishes consumption among them. The discipline of the school is excellent. A special feature of the work is the special drill to which the boys are subjected, and which, I have no doubt, makes them healthier and more manly American citizens. The school is one of the most interesting in the Eastern States, and is magnificently appointed. The cost per head is £67 10s.

Lexington Avenue School for the Deaf, New York (Principal Gruver).—Two hundred and eighteen pupils. This is an oral school, composed of the same material as the Washington Heights School, viz., the dumpings of all the nationalities of Europe. The system is oral, so there is no attempt to deal separately with the semi-deaf or semi-mute. There are about 10 per cent. mentally deficient children, but the Principal says these would fail under any system. The speech and lip-reading are good, the intelligence of the chil-

dren is good, in the higher classes very good—better, I think, than in the higher classes of "combined" schools. The cost per head per annum is £60.

J. Kerr Love, M.D.

Examiner's Report.

Appended hereto will be found the report of Dr. Spankie, our official examiner for last session. This was the third year in succession that Dr. Spankie has acted in this capacity, and he has entered very sympathetically into all the work and pastimes of the pupils, and, it is needless to say, stands high in their good graces. He spent nearly a week at the Institution and went carefully into the work of each class. His estimate of the work done and results accomplished is fully recounted in his report.

In conclusion I desire to express my warm appreciation of the staff of officers and teachers, nearly all of whom have been most faithful and conscientious in the discharge of their duties and have given me their loyal and hearty support and co-operation.

I have the honor to be, sir,
Your obedient servant,
C. B. Coughlin,
Supt.

PHYSICIAN'S REPORT.

Belleville, Ont., October 1st, 1907.

Hon. R. A. Pyne,
Minister of Education:—

Sir,—On assuming the duties of attending physician to the Institution for Deaf and Dumb on October 1st last, we were confronted with typhoid fever. Careful investigation of the ordinary sources of this disease failed to reveal any cause. An analysis of the water used for drinking purposes, as well as the milk, and the various sources of supply, gave negative results. At this particular season typhoid prevailed to an unusual degree throughout the various parts of the Province, and in some districts was unusually malignant. There is no reason to doubt that the infection of the disease was contracted previous to the patient leaving home.

The first patient was Elizabeth Webster, from near London, Ont.—very seriously ill; made a slow but satisfactory recovery, and was returned home for the remainder of the session.

The second case was Edward Hughes, from Carleton Place—moderately severe; made a good recovery. Was returned home, but received back again later in the session.

The serious nature of the disease, and running a protracted course, rendered necessary the employment of additional nurses. Throughout the term a number of suspected cases occurred, necessitating blood analysis to confirm the diagnosis, which in some cases was proven typhoid, in others not. A number of cases of moderate severity occurred among the attendants, but happily all made uninterrupted recoveries.

During the entire period that typhoid prevailed a regular water analysis was made weekly, and on the slightest suspicion of contamination its use for drinking purposes was forbidden, without previously being boiled. Milk analysis was also made at intervals as was considered proper.

Affections of respiratory organs, usually of mild degree, have been more or less prevalent throughout a considerable part of the term, particularly during the changeable or inclement weather. Throat affections, bronchial difficulties and la grippe have been quite frequent, but none of the pupils were considered dangerously ill, requiring confinement to the sick dormitory for a few days only. This condition, with the present sanitary arrangement, can hardly be entirely avoided. The indoor life of the children necessary during the hours in class-room and study, renders it imperative, if their general health is to be preserved, that they shall have physical exercise under proper sanitary precautions. This can only be in the open, where frequently weather conditions are unfavorable, and productive of the respiratory affections above enumerated.

We have been exceedingly fortunate during the past year in regard to infectious diseases among the children of the Institution: the only cases being four of mumps, mild; three cases of infectious skin disease; a number of mild cases of influenza. All were promptly isolated, and recovered without any complications.

In the home of Mr. Peppin, the engineer, situated on the Institution grounds, two cases of scarlet fever broke out. The elder one was severely ill, and was removed to the Belleville General Hospital. Both recovered. The house and everyone connected therewith were strictly quarantined. Every attention was paid to disinfection, and no further spread of the disease occurred.

Minor accidents incidental to a community of children on the playground have occurred from time to time, even under the most watchful supervision, wounds, contusions, etc., some necessitating surgical interference.

Two cases for minor surgical operation became necessary and urgent. Cyril Loper and Frank Jennings. Both made rapid and uninterrupted recoveries. Were out of class one week only. Opening abscesses, removing finger nails, etc., became necessary on a few occasions.

Digestive disorders, with a marked tendency to constipation and general indisposition, exist to a very considerable extent. This condition is inseparably associated with dietetics and sanitation. During the past session I have had under my observation the food supplies of the Institution, and with the concurrence of the Superintendent, I have felt it necessary in the interests of the pupils to make some suggestions as to the kind and variety best adapted to meet existing conditions. In this we have been rewarded by a very decided improvement in these functional disorders. There is still room for further improvement, however. The Superintendent is having installed a new system of lavatories. This is a much-needed reform, and it is expected, by the increased accommodation thus afforded, that much benefit will result to the children in the improvement of the digestive disorders from which many suffer.

During the session we have had a number of other important cases: one of pneumonia, one chorea, one goitre, one facial paralysis; a number of cases of middle ear disease, besides many slight ailments incidental to child life in a large school.

It is very gratifying to be able to report no case of mortality amongst the children, and as the session closed the pupils without exception were in the enjoyment of the best of health.

Among the officers, teachers and employees there has been some serious sickness. Two cases of typhoid fever of moderate severity, occurring at the time the disease was epidemic throughout the Province. Both recovered. Two cases of appendicitis—recovered. Throat and bronchial affections among

the teachers, the nature of their occupation, and the close confinement to class-room rendering them peculiarly susceptible to colds, and in some cases it was necessary to temporarily relinquish teaching. Mr. Dowrie, the carpenter, was compelled to cease work for some time, suffering with bronchitis. On the 15th December the late Mr. Cunningham, who had been a faithful and respected servant of the Institution as baker for many years, left the Institution for the last time. He had been in failing health for many weeks, but continued in the discharge of his duties until, attacked with influenza, he was obliged to cease work. He lingered for several weeks in the vain struggle to rally from the disease, but pneumonia complicating, he passed away at the age of seventy-eight.

We also had a number of accidents among the employees, generally of a minor character and unimportant. Mr. Wilkins, the fireman, however, met with a painful accident; fell from a scaffolding, causing a very severe sprain of the ankle joint, from which he was disabled from attending his occupation for several weeks. He has made an excellent and satisfactory recovery, however.

In conclusion, I wish to make mention of the important change through which the Institution has passed since the beginning of last session.

Mr. Matheson, the late Superintendent, having resigned his post, has been succeeded by Dr. C. B. Coughlin. Of the former it is only necessary to say that his history is to a large extent the history of the Institution. Dr. Coughlin, his successor, comes to the Institution with every hope of success. An accomplished and courteous gentleman, he has entered upon the work with energy and enthusiasm, determined to make this Institution one of the very best of its kind. The reforms he has already inaugurated mark him as a man of progress, and under his guiding hand the success of this Institution is assured. I desire to wish him every success in the splendid work he has undertaken.

I have the honor to be,
Sir,
Your obedient servant,
W. W. Boyce, M.B.

Report of the Public School Inspector.

Hon. Dr. R. A. Pyne,
Minister of Education, Toronto, Ont.

Sir,—As Examiner of the Literary Classes of the Deaf and Dumb Institution, at Belleville, for the year 1907, I have the honour to report as follows:—

1. *Articulation Classes.*

There are two special teachers of Articulation and sixty-eight pupils in attendance. The pupils selected for this work are those who show some power of speech and it is remarkable how this power can be developed. Some of these pupils recited quite intelligibly for me during my inspection of the classes. These teachers have too much work, and the pupils capable of this form of instruction cannot get sufficient training with only two teachers, and the number of pupils in these classes will increase from year to year. Statistics show that in the United States nearly 70 per cent. of pupils at similar Institutions take this work.

An idea of the work accomplished in these classes during the session now closing may be gained from the following curricula:—

(*a*) *Miss Gibson's Room.*

There are thirty-five (35) pupils divided into five classes, with courses of study as follows:—

Class 1. Elements of sound and combinations. Commands. Numbers to twelve. Colors. Names of things in the room and a few animals. Names of classmates and teacher.

Class 2.—Articulation drill. Action work (lip reading given by teacher and pupil). Reproduction of same in Five Slate system. Nursery rhymes. The Lord's Prayer. Number in hundreds.

Class 3.—Articulation drill. Reading from "Far and Near." Reading from "Chart Stories." The Lord's Prayer. Poems. Action work. Numbers in hundreds. Simple news items from lip-reading.

Class 4.—Articulation Drill. Journal work for articulation. News items from lip-reading. The Lord's Prayer. Poems. God Save the King. The Maple Leaf, etc.

Class 5.—Articulation drill. Advanced news items for lip-reading and articulation. Advanced journal work for articulation. Poems, etc. Mental arithmetic. Conversation.

(*b*) *Miss Cross' Room.*

There are thirty-three (33) pupils divided into five classes with courses of study as follows:—

Class 1.—Elements of sound and combinations. Commands. Numbers to twelve. Colors. Names of things in the room and a few animals. Names of classmates and teacher.

Class 2.—Vowel drill. Simple addition and subtraction mentally. Coins. Actions. Reading from charts. Hidden objects. Days of the week. A few simple questions. Nursery rhymes.

Class 3.—The Lord's Prayer. Months. Seasons. Grace before and after meals. Numeration to one hundred. Actions. Short stories. Word building. Recitations.

Class 4.—Stories. Conversation. News. Verbs. Mental arithmetic. Grace before and after meals. Recitations.

Class 5.—Articles from Newspapers. Ask and tell. Stories. News. Geography. Comparisons and opposites of adjectives. Shopping. Recitations.

It has been discovered that many pupils heretofore considered absolutely deaf have some hearing and that this hearing is capable of some degree of development. These discoveries at this Institution this year have been clearly demonstrated and without any extraneous assistance I have been able to speak to and be understood by some pupils who, until this year, were not known to have any hearing at all. By means of telephones and otophones conversations can be carried on very easily with some of these pupils—I look for other advances in this line.

1. *Other Regular Classes.*

Apart from the articulation classes, regular teaching is done by thirteen qualified teachers. I examined very carefully the work done by each teacher and am satisfied that each is doing honest work. Teaching is

arduous under ordinary circumstances, but it is generally admitted that the teaching of the deaf is the most wearying of all. I would like to see some provision made for retiring allowances or annuities to aged teachers of the deaf.

Other Classes.

In addition to the regular class-room work, the pupils have the benefit of regular instruction in special classes and trade work, as follows:—

(a) Domestic Science.

This class is in charge of Miss Gowsell and is doing excellent work with boys and girls. The girls learn to cook and do housework generally, and they do it well. The boys learn to sew and mend their own clothes—their work in this respect is highly commendable.

(b) Dressmaking and Millinery and Fancy work.

Miss Dempsey, an experienced dressmaker and a good teacher, is in charge of this department. Her pupils are able to make their own dresses and those of younger pupils. The work done is good and the pupils are much interested in it and enjoy their privilege.

Miss Bull conducts the Fancy Work branch and some splendid work is turned out in this line.

(c) Manual Training.

Mr. Rodwell, an expert from England, is in charge of the Manual Training Department, always a popular branch of education with the boys and deservedly so, for Mr. Rodwell is doing good work, and he has enthusiastic pupils to deal with. I am much pleased with the work done here.

(d) Laundry, Printing Office, Shoe Shop, Bakery, Carpenter Shop and Barber Shop complete the trade list at this Institution. I visited all these departments of work and found all in good order.

General Remarks.

I find no evidence of friction of any kind throughout the Institution. The discipline is perfect, the buildings and grounds are scrupulously clean, the dormitories well cared for and every official alert. The pupils, 227 in number, are orderly, kind to one another, neat and cleanly in appearance, apparently most diligent in their work, and of a very healthy appearance.

New Ideas.

Oral Teaching.

Oral teaching of the deaf is now practised at this Institution. Mr. Rodwell conducts a class of thirteen pupils in this way and is making good headway with them. It is predicted that this form of teaching will be of the greatest importance in the future, as it enables pupils to increase their vocabularies much more rapidly and to communicate with each other more easily—it is simply lip-reading made perfect and the results already achieved here are sufficient to warrant its continuance.

Gymnasium.

The Institution needs a gymnasium. The want is felt. The only play-room for the boys is a cellar, itself too small and from a hygienic or sanitary standpoint utterly unfit for occupation.

Drill and Calisthenics.

This is a splendid addition to the work. Mr. Rodwell has taken up this work with the boys and Miss Gowsell with the girls. Though only a short time in operation, I consider the work now being done quite good enough for public exhibitions. It will undoubtedly have a good effect upon the health of the pupils and already the effect is noticeable in their appearance and in their studies.

Fire Drill.

I witnessed a very satisfactory exhibition of fire drill. The call was most unexpected; even the resident teachers were all sound asleep when the alarm was given. The night was a cold, dark and rainy one. The first alarm was sounded at 11.20 p.m. and before 11.25 every child in the building was at the door ready to leave, and many of them had to come down three stories. This was a good test, as the building was filled with smoke on the ground floor, and a most satisfactory one, as the children came down in perfect order and in excellent time.

Conclusion.

I enjoyed my visit to this Institution very much this year, as my two former visits had made me familiar with the duties required and enabled me to go to work at once with the various classes. My observations lead me to believe that of all the occupations open to deaf-mutes, that of agriculture in some of its branches is the best, and I believe that an effort at Agricultural College extension would be successful in this respect, if applied here. Agriculture as a science should be taught to these boys here—no other field presents the same prospects for safety and independence. The dangers and uncertainties of town and city life and competition are not suitable to deaf-mutes and they should rather be educated along other lines.

Dr. Coughlin, the newly appointed superintendent, is perfectly at home here and fully appreciates the importance of the work he has undertaken. Already he has acquired a fair knowledge of the language and is in full sympathy with the pupils and the staff. His sympathetic nature and professional knowledge will, I predict, enable him to do much for the cause of deaf-mute education in this province.

I have the honour to be,
Sir,
Your obedient servant,

(Signed) W. Spankie,
Literary Examiner.

Kingston, Ont.,
June 7, 1907.

We beg to acknowledge the receipt of the following papers sent us in exchange for the Canadian Mute:—

Cornwall Freeholder, Deseronto Tribune, Forest Standard, Thorold Post, Hamilton Herald, Carleton Place Herald, Winnipeg Telegram, Carp Review, Simcoe Reformer, Manitoba Free Press, Goderich Star, Brighton Ensign, Renfrew Mercury, Eganville Star-Enterprise, Orillia Times, Niagara Falls Review, Colborne Enterprise, Forest Free Press, Trenton Advocate, Trenton Courier, Brockville Times, Tara Leader, Colborne Express, Peterboro Examiner, Acton Free Press, Shelbourne Economist, Brantford Expositor, Strathroy Despatch, Dufferin Post, Detroit Journal, Mount Forest Representative, Kingston Whig, North Hastings Review.

NUMBER OF PUPILS IN ATTENDANCE EACH OFFICIAL YEAR SINCE THE OPENING OF THE INSTITUTION.

——	Male.	Female.	Total.
From October 27th, 1870, to September 30th, 1871	64	36	100
" " 1st, 1871, " 1872	97	52	149
" " 1872, " 1873	130	63	193
" " 1873, " 1874	145	76	221
" " 1874, " 1875	155	83	238
" " 1875, " 1876	160	96	256
" " 1876, " 1877	167	104	271
" " 1877, " 1878	166	111	277
" " 1878, " 1879	164	105	269
" " 1879, " 1880	162	119	281
" " 1880, " 1881	164	132	296
" " 1881, " 1882	165	138	303
" " 1882, " 1883	158	135	293
" " 1883, " 1884	156	130	286
" " 1884, " 1885	168	116	284
" " 1885, " 1886	161	112	273
" " 1886, " 1887	151	113	254
" " 1887, " 1888	156	109	265
" " 1888, " 1889	153	121	274
" " 1889, " 1890	159	132	291
" " 1890, " 1891	166	130	296
" " 1891, " 1892	158	137	285
" " 1892, " 1893	162	136	298
" " 1893, " 1894	158	137	295
" " 1894, " 1895	160	135	295
" " 1895, " 1896	173	137	210
" " 1896, " 1897	164	128	292
" " 1897, " 1898	167	138	305
" " 1898, " 1899	161	132	294
" " 1899, " 1900	152	130	282
" " 1900, " 1901	157	143	200
" " 1901, " 1902	147	141	288
" " 1902, " 1903	140	143	283
" " 1903, " 1904	137	134	271
" " 1904, " 1905	130	138	268
" " 1905, " 1906	116	143	258
" " 1906, " 1907	126	145	271

List of Pupils in the Ontario Institution for the Deaf and Dumb for the Year ending September 30th, 1907, with Post Office Addresses.

Counties.	P. O. Address.
Algoma :	
Barker, Belle	Sault Ste. Marie.
Beatty, R	Bruce Mines.
Dalgleish, Eliz	Sault. Ste. Marie.
Parr, J. Hugh	West Korah.
Brant :	
Hustwayte, Franz	Paris.
Lloyd, Ruth	Brantford.
Lloyd, Howard	Brantford.
Mitchell, Geo. L	Brantford.
Smith, Wm. R	Onondaga.
Bruce :	
Atkinson, Gladys	Paisley.
Brown, Annie	Chesley.
Brown, Myrtle	Chesley.
Brown, John	Chesley.
Gerolamy, Marie	Tara.
Green, Mary	Chesley.
Green, James	Chesley.
Komph, Spray	Kincardine.
Lorentz, Mary	Mildmay.
Schwalm, Mary	Mildmay.
Weiler, Diana	Mildmay.
McKee, Carl	Pinkerton.
Carleton :	
Chaine, Jos	Hintonburg.
Delinelle, V	Ottawa.
Dillaire, Romeo	Ottawa.
Evoy, Jas	Carp.
Gauvreau, T	Ottawa.
Green, Minnie	Diamond.
Green, Thos. John	Diamond.
Huband, Gerald	Ottawa.
Brigham, Thos	Ottawa.
Durham :	
Brooks, Effa	Solina.
McMillan, Jos	Newcastle.
Sheckleton, Alf	Burton.
Dufferin :	
Aldcorn, B	Corbetton.
Granger, Martha	Honeywood.
Dundas :	
Hoy, Gertie	Hallville.
Elgin :	
Carpenter, Lena	Rodney.
Caves, Jessie	St. Thomas.
Elgin.—Continued.	
Gwalter, Harry	St. Thomas.
Hammond, Catharine	St. Thomas.
Paul, Ed. Geo	St. Thomas.
Shepley, May	Clachan.
Steigmeir, May	Aylmer.
Essex :	
Antaya, James	Stony Point.
Bain, Olive	Windsor.
Bain, Josephine	Windsor.
Berthiaume, Marilda	Tecumseh.
Berthiaume, Dorina	Tecumseh.
Berthiaume, Lionel	Tecumseh.
Kerr, Avis	Elmstead.
Lucier, Tom	McGregor.
Meloche, Edmund	River Canard.
Penprase, Ruth	Elmstead.
Penprase, Alfred	Elmstead.
Petrimoulx, Geo	River Canard.
Swader, Earl	Windsor.
Walker, Achille	St. Joachim.
Watkins, Hazel	Windsor.
Frontenac :	
Barnett, Gerald	Sydenham.
Barnett, Winnifred	Sydenham.
Walker, Lillian	Kingston.
Grey :	
Brown, Thos. H	Markdale.
Brown, Alma	Markdale.
Johnson, Bertha	Owen Sound.
Kindree, Earl	Owen Sound.
Scott, Wm	Keldon.
Wilson, Janet	Harkaway.
Wilson, Elsie	Harkaway.
Glengarry :	
Gordon, Annie	Bridge End.
Grenville :	
Swayne, Robert	Oxford Mills.
Hastings :	
Baker, Gerald	Belleville.
Dunn, John	Tweed.
Doughty, Mary	Eldorado.
Hough, Ethel	Holloway.
Herman, Nina Pearl	Stirling.
Johnston, Mary	Belleville.
Ketcheson, Florence	Sidney Crossing.
Nelson, Ethel	Belleville.
Edwards, Mary	Boulter.

List of Pupils in the Ontario Institution for the Deaf and Dumb.—*Continued.*

Counties.	P. O. Address.
Hastings.—Continued.	
Smith, Percy	Point Ann.
Smith, Earl A.	Belleville.
Young, Fred.	Madoc.
Ward, Albert	Stirling.
Haliburton :	
Eastman, Alma	Kinmount.
Sipe, Thos.	Allsaw.
Whistle, Janie	Minden.
Huron :	
Colclough, Lorne	Holmesville.
Colclough, Hattie	Holmesville.
Balkwill, Clara.	Exeter.
Doubledee, Lena	Belmore.
Montgomery, Elsie	Gorrie.
Marshall, John Ezra.	Hensall.
Sours, Gladys	Clinton.
Steep, Phœbe	Goderich.
Thompson, Arthur	Dungannon.
Young, Clara	Londesboro.
Halton :	
Hartley, Clara	Milton.
Haldimand :	
Forrester, Harry	Dunnville.
Forrester, Asa.	Dunnville.
Kent :	
Buller, Harry	Ridgetown.
Beckett, Sam.	Chatham.
Adkin, James	Bothwell.
Chevalier, Wm.	Tilbury.
Gibson, Maggie	Dresden.
Gibson, Winnifred	Dresden.
Meredith, Stella.	Kent Bridge.
Neville, Manie,	Dresden.
Parker, Beatrice.	Dresden.
Toll, Nova Rose.	Ridgetown.
Lambton :	
Brown, Florence	Petrolia.
Breault, Gertie.	Sarnia.
Darew, Duncan	Sarnia.
Jennings, Frank	Forest.
Johnson, Sara.	Thedford.
Leckie, Elsie.	Sarnia.
Leckie, Alice.	Sarnia.
Squire, Edith	Wanstead.
Lanark :	
Blake, Freddy	Almonte.
Hughes, Earnest	Carleton Place.
Lanark.—Continued.	
Jacklin, Myrtle	Rideau Ferry.
McGregor, Ruby	Almonte.
Pollock, Bessie.	Appleton.
Leggett, Gordon	Perth.
Lincoln :	
Dilse, Curtis	Beamsville.
Heaslip, Myrtle.	Wellandport.
McCready, Aletha.	Caistor Centre.
Swick, Amos.	Beamsville.
Lennox and Addington :	
Hartwick, Archibald	Napanee.
McAdam, Wesley	Tamworth.
Middlesex :	
Courscey, Viola	Lucan.
Fishbein, Sophia.	London.
Fishbein, Eddie.	London.
Humphrey, Hazel.	London.
Hodgins, Mary.	Lucan.
Hodgins, Sadie	Lucan.
Laugheed, Eva.	London.
Russell, Mary.	Ailsa Craig.
Ryan, Chas.	Lucan.
Steele, Annie	London.
Leeds and Grenville :	
Countryman, Harvey.	Prescott.
Muskoka District :	
Dierks, Carolina.	Kilworthy.
Durno, Archie	Bracebridge.
Ireland, Louis	Bracebridge.
Russell, Alice	Dorset.
Legault, Clarida.	Callander.
Norfolk :	
Becker, Ethel.	Clear Creek.
Boomer, Duncan.	Windham Centre.
Cole, Rose.	Bookton.
Earl, Chas.	Blaney.
Franklin, Sara.	Clear Creek.
Northumberland :	
Ball, Lisgar.	Baltimore.
Ball, Glenn.	Baltimore.
Lott, Reata	Campbellford.
Parker, Clinton	Baltimore.
Parker, Clifford.	Baltimore.
Nipissing District :	
Dorschner, Chas	Mattawa.
Gauthier, Alfred	Cobalt.

List of Pupils in the Ontario Institution for the Deaf and Dumb.—*Continued.*

Counties.	P. O. Address.
Nipissing District.—Continued.	
Ellis, Wesley	Cobalt.
Rhody, Theodore	North Bay.
Ontario :	
Quigley, Walter	Oshawa.
Oxford :	
McFarland, Mona	Eastwood.
Abrey, Irene	Drumbo.
Peel :	
Duke, Ettie	Sleswick.
Curry, Duncan	Burnhamthorpe.
McLeish, Marjorie	Star.
McVean, Alex	Woodhill.
Perth :	
Bauman, Isaac	Milverton.
Robertson, Stewart	Stratford.
Strong, Luella	Millbank.
Parry Sound District ;	
Veitch, Eliz	Spence.
Prescott and Russell :	
Hughes, Myrtle	Treadwell.
Hughes, Iva	Treadwell.
McLaren, Geo	Springhill.
McLaren, John	Springhill.
Pregent, Leopold	Curran.
McDougall, Elsie	Grant.
McDougall, Peter	Grant.
Peterboro :	
Charliebois, Walter	Peterboro.
Kennaley, Winnie	Peterboro.
Lawson, Violet	Peterboro.
Lawson, Lila	Peterboro.
Lawson, Gladys	Peterboro.
O'Brien, Gerald	Peterboro.
Harper, Marion	Peterboro.
Tretheway, Roy	Gooderham.
Short, Jean	Keene.
Renfrew :	
Cuddy, Edward	Brudenell.
Derochie, Clara	Arnprior.
Derochie, Caroline	Arnprior.
Bruss, Henry	Pembroke.
Lacombe, Jos	Arnprior.
Marquardt, Gustave	Hardwood Lake.
Renfrew.—Continued.	
Smith, Edward Scott	Lanark.
Whyte, Eleanor	Arnprior.
Whyte, Bella	Arnprior.
Simcoe :	
Boyle, Mary	Midland.
Cheviette, David	Lafontaine.
Graham, Victor	Collingwood.
Gannon, Ellen	Phelpston.
Hall, Ewart	Midland.
Hamilton, Alma	Everett.
Hamilton, Enie	Everett.
Nelson, Flo	Marchmont.
Paddison, Thos	Emsdale.
Tudhope, Laura	Orillia.
Carefoot, Seymour	Collingwood.
St. Amant, Herman	Penetang.
Watson, Edna	Orillia.
Stormont, Dundas.	
Lalonde, Emma	Cornwall.
Loper, Cyril	Morrisburg.
Morton, Floyd	Newington.
Victoria :	
Fountain, Herbert	Coboconk.
Fountain, Farley	Coboconk.
Jewell, Ena	Manilla.
Whitworth, Flo	Lindsay.
Windrim, Rita	Norland.
Western, Flo	Little Britain.
Waterloo :	
Martin, Absalom	Waterloo.
Golds, Margaret	New Hamburg.
Golds, Chas. Watt	New Hamburg.
Underwood, Jonathan	Bridgeport.
Wellington :	
Clark, Addie	Guelph.
Carter, Lizzie	Guelph.
MacLachlan, Wm	Mount Forest.
Wentworth :	
Brown, J. Harold	Hamilton.
Depew, Georgie	Hamilton.
Maas, Anna	Hamilton.
Salmon, Albert	Hamilton.
Etherington, Mabel	Hamilton.
Gummo, Gertie	Hamilton.
Webster, Elizabeth	Waterdown.
Webster, Elsie	Waterdown.
Pipher, Celia	Hamilton.
Tait, Harold	Hamilton.

List of Pupils in the Ontario Institution for the Deaf and Dumb.—*Continued.*

Counties.	P. O. Address.
York :	
Brown, Walter	Toronto.
Barclay, Helen	Toronto.
Baskerville, Silas	Toronto.
Bowman, Ellsworth	Toronto.
Brown, Fred	Toronto.
Brown, Lily	Toronto.
Buchan, Alex	Toronto.
Buchan, John	Toronto.
Buchan, Drucilla	Toronto.
Best, Olive	Toronto.
Burley, Willie	Toronto.
Cunningham, Martha	Toronto.
Curtis, Lillian	Todmorden.
Chestnut, Arlie	Toronto.
Elliott, Geo	Toronto.
Ensminger, Maggie	Markham.
Wilson, Arthur	Toronto.
Wilson, Chas	Toronto.
Walker, Arthur	Norway.
York.—Continued.	
Fleet, Ellen	Toronto.
Hazlitt, Wm	Toronto.
Hazlitt, Dorothy	Toronto.
Hazlitt, Evelyn	Toronto.
Holbrook, Louisa	Toronto.
Johnson, Wm	Swansea.
Kennedy, Muriel	Toronto.
Marks, Jennie	Toronto.
Mason, Myrtle	Toronto.
McCaul, Alex	Toronto.
Mosher, Archie	Highland Creek.
McCallum, Roy	Strange.
Noble, Edgar	Toronto.
Payne, Eddie	Toronto.
Peacock, Ada	Wychwood Park.
Stevens, Grace	Toronto.
Eaton, Arthur	Toronto.
Watson, Muriel	Toronto.

STATEMENT No. 5.

Year ending September 30th, 1907.

Cost per pupil.

Heading of expenditure.	Total expenditure, year ending September 30, 1906.	Yearly cost per pupil, September 30, 1906.	Weekly cost per pupil, September 30, 1906.	Total expenditure, year ending September 30, 1907.	Yearly cost per pupil, September 30, 1907.	Weekly cost per pupil, September 30, 1907.
	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
Medical department	302 15	1 41	03	319 90	1 40	03
Butcher's meat	2,988 12	13 96	27	3,320 74	14 57	28
Flour, etc	1,052 13	4 92	10	1,003 80	4 40	08
Butter and milk	2,359 17	11 02	21	2,794 31	12 26	24
General groceries	2,074 04	9 69	19	2,288 75	10 03	19
Fruit and vegetables	736 26	3 44	06	723 85	3 17	06
Bedding and clothing	754 07	3 53	07	812 82	3 56	07
Fuel	6,218 49	29 06	56	6,359 51	27 90	52
Light	1,009 80	4 72	09	1,010 85	4 43	09
Laundry, soap, etc	707 19	3 30	06	539 14	2 37	05
Books and apparatus	541 69	2 53	05	430 05	1 90	04
Printing, postage, etc	770 80	3 60	07	801 61	3 52	07
Furniture, etc	455 70	2 13	04	832 38	3 65	07
Farm	477 21	2 23	04	570 96	2 50	05
Repairs	638 11	2 98	06	878 37	3 85	07
Sewage	92 40	43	01	46 00	20	00½
Water	900 00	4 21	08	900 00	3 95	07½
Miscellaneous	497 49	2 33	04	593 74	2 60	05
Salaries and wages	25,336 16	118 39	2 28	25,581 22	112 20	2 16
	47,910 98	223 88	4 31	49,808 00	218 46	4 20

Average number of pupils, 1905-06, 214.
Annual cost per pupil, 1905-06, $223.88.
Weekly cost per pupil, 1905-06, $4.31.

Average number of pupils, 1906-07, 228.
Annual cost per pupil, 1906-07, $218.46.
Weekly cost per pupil, 1906-07, $4.20.

Certified correct, W. COCHRANE, Bursar.

APPENDIX M.—HONOURS PAID TO SCHOOL PIONEERS.

MONUMENT UNVEILED AT VANDELEUR TO MEMORY OF FOUNDERS OF SCHOOL SECTION No. 11, ARTEMESIA.

(Condensed from Toronto Weekly Sun and Daily Globe.)

A cabin built of unhewn timber with moss and clay filling the spaces between the roof formed of basswood logs split in two; a door hung on leather straps and one narrow window alongside; a single room with home-made stools, rude table, with the bunks laid on staves driven into the wall, and at one end a huge fire-place built of stone, with chimney constructed of sticks and mud.

Outside, a little clearing, disfigured by great stumps, charred and blackened by the clearing fire, and in the interval between the stumps, a few hills of potatoes and patches of grain. All about, the great maples and towering pines shutting out the view to the north, south, east and west, and allowing but a faint glimpse of the blue vault of heaven above; the only music at evening that given forth by the play of the wind in the tree tops, and the drear loneliness of the midnight hours made more dreary by the howl of the wolf in the lanes of the forest.

That scene, reproduced in a score of similar scenes, presents a fairly accurate picture of the nucleus of a settlement formed a trifle over 50 years ago by a little band of pioneers located some five miles south-east of where Markdale now stands.

Toil, Loneliness and Privation.

But this picture does not portray all. With it there were the long weary days of toil, as the stillness of the frosty air of winter was broken by the steady chop, chop of the axe, and the resounding crash as a great beech or maple fell, to make way for a little more grain or a few more potatoes. Behind it there was the toilsome tramp of miles along a blazed trail, or over a corduroy road, with flour or other provisions on back. Before it there was the hasty work of seed time, and then the hurrying away of the head of the family to earn a few dollars, in return for work done on the further advanced farms at "the front," while the mother and little children, left alone in the wilderness, kept the hoes going in the potatoe patch which was so largely depended upon for sustenance in the winter.

Such, in a general way, were the conditions half a century since in the section spoken of. But, even amid such surroundings, and in the face of such a fierce struggle for mere existence, the higher interests of the children of the settlers were not forgotten. These hardy pioneers came together, organized a section, and formed a school in which the children might secure an education such as would better fit them for the battle of life. The school, naturally enough, was in keeping with the homes of the settlers, but that it it did its work well is proved by the high standard of intelligence prevailing in the neighborhood to-day.

Peace and Plenty of the Present.

What are the conditions in this same section on this July day of 1907—50 years after? On every hand there are great barns, on stone or cement foundations with stabling underneath; brick homes embowered in shrubbery and flanked by fruitful orchards and rich gardens dot the hill sides; the

landscape is clothed in great fields of grain and clover; roads, almost equal to city streets, furnish the means for easy travel to and fro; a neat brick schoolhouse with spacious grounds, has replaced the log structure of the half

Monument Erected in Memory of the Founders of S. S. No. 11, Artemesia.

century which has passed; and the rural phone—that great marvel of modern life—provides instant means of communication with doctor, store and railway.

Grateful Remembrances of Those who are Gone.

And those who enjoy so much, bought at such cost, in sweat and tears by those who are gone, have proved themselves not unmindful. The men of to-day have gratefully remembered the inestimable service rendered by those who are now sleeping in near-by church-yards. The names of those strong men and patient women who laid the foundation of the finished civilization of the present have had their names chiselled on a monument of granite erected under the sheltering maples which add beauty to the brick schoolhouse of to-day. How was the idea conceived which resulted in the creation of this monument? It was an inspiration. One summer evening John Boland and his wife were returning from a last visit to one of the last of the pioneers. "It will," said Mr. Boland, "be only a few years until all of the old settlers are gone. While some still remain, and some of the memories recording their struggles and privations are still in existence, something should be done to perpetuate their names and the story of their sacrifices."

The idea expanded in the minds of those to whom it had come. It was talked over with the neighbours, a committee was formed, and the final result was the collection of funds from among the descendants of the pioneers and the erection of a monument bearing the names of the heads of those families who formed the first settlement.

A Model Dominion Day Celebration.

The monument was put in place, and one of the best celebrations of Dominion Day was that connected with the ceremonies incident to the unveiling and dedication of the same. People came by hundreds from far and near to participate in the event. The roadside adjacent to the school ground was lined with buggies, creating a scene similar to that at an up-to-date township fair, while the grounds themselves were crowded with men, women and children who had come to witness the ceremony of the unveiling and to hear the addresses in connection therewith.

There were 26 heads of families (husbands and wives) living in the settlement when the section was formed in 1857. Of these only three survive—J. Holley, R. Smith and Mrs. Carson, the latter living near Flesherton. Mrs. Carson was unable to be present, but Messrs. Holly and Smith were in attendance, and naturally were the chief figures in the ceremonies of the day. To them was allotted the task of unveiling the monument, and later on, they were honored with a front seat on the platform. To Mr. Boland, a son of one of the first settlers, and son-in-law of Mr. Smith, fell the duty of presiding. His daughter, doubly a grand-child of the pioneers, read a beautiful and appropriate poem commemorative of the work of the heroes who are so nearly all gone, and one of the most pleasing events of the day was the singing of "The Maple Leaf" by the children who are heirs to the glories of the past and the bounties of the present.

An Eloquent Tribute to the Heroes of Toil.

Really eloquent was the tribute paid by J. B. Lucas, M.P.P., to the men whose axes cleared the forest and whose toil made the rough places smooth. "We are here," said the member for Centre Grey, "to do honour to the

pioneers who laid the foundations of that magnificent civilization, the evidence of which we see on every hand. The children of those who are gone are doing credit to themselves by their tribute of respect to those to whom we all owe so much. The men whose memory we are honoring did more than prepare the way for material prosperity. They brought with them two institutions which form the corner-stones of the moral and intellectual character of this community—the log school and the log church. All we have of material prosperity and a high form of civilization, we owe to the brave men and patient women who faced life's battle together and suffered and toiled that we might enjoy. In the lives of these men and women—and those who laid the foundations of like settlements in other sections—is written the real history of this Province. They have nearly all passed off the stage of life, and ere all are gone we should take steps to place on record the story of the trials and hardships of these heroic makers of Ontario. Work such as they performed, if carried through on a larger field, would have commanded the admiration of the world. Let us, who know from memory or tradition of the marvels that were accomplished, lift our hats in reverence to those whose sufferings will bless even beyond the time which the granite we have unveiled will endure."

Character Still Lives.

That Mr. Lucas' tribute to the moral worth of the pioneers was no mere form of words was proved by a statement made by Chairman Boland. "This school," said Mr. Boland, "has now been in existence for 50 years. In that time hundreds of pupils have passed through its doors into the outside world; but, of all those who have passed, not one has been the cause of the expenditure of a single cent by those connected with the administration of justice because of crime committed."

An Able Address.

Mr. J. J. Tilley, Inspector of County Model Schools, delivered an able address on our school system, paying particular attention to how it enabled the coming citizen to make a living. Our population to-day is not all in the country, but a large portion is found in the cities and earn their bread from other places than the farm. For some years all children should have the same studies, then a change should be made, and technical education be given. He approved of the action of the Minister of Education in doing away with third class certificates, and explained the means by which teachers' salaries were being raised by the Government aiding in the payment of good salaries where suitable accommodation and equipment were provided.

Educational Problems.

Dr. Colquhoun, the Deputy Minister of Education for Ontario, gave an excellent address on the educational problems of Ontario. The pioneers had made great sacrifices for the state, so must the present generation. This was being done by the Governcent, which was placing the Provincial University in excellent position to do the best work. The public school sought to give as complete an education as possible since the great majority of the children never reach the university. The rural boy was entitled to all the advantages the city scholar might have. He held it was a good step to increase the rural school grant from $120,000 per year to $380,000, as no country could be greater than its rural population.

He also hoped each school would take advantage of the Government's flag offer and have the national emblem over its school, as it revealed the Empire's foundation, liberty, justice and truth.

Inspector N. W. Campbell, of South Grey, pleaded for better school equipment, and expressed himself as being in full sympathy with the recent changes in the school law.

Judge Widdifield of Owen Sound, in a brief address urged that some method be employed whereby the youth may have given him some scientific education to fit him for his work.

Other speakers were C. W. Chadwick, Toronto; P. McCullough, Markdale; Rev. Dr. Caldwell, Flesherton; Rev. J. S. I. Wilson, Markdale, and Rev. L. F. Kipp, Flesherton. For entertainment between the addresses and tea time, a number of local foot-ball teams played exhibition matches. In the evening a concert was held in the hall near the school grounds.

The Monument.

The monument, which is erected in a corner of the spacious and well shaded school grounds overlooking the beautiful Beaver River Valley, which lies just beyond the school, stands on a foundation 4 ft. deep of broken stone. On top of this is a cement base surmounted by a Longford stone 14 inches in depth. Above this is the monument itself, a splendid specimen of Scotch granite about 9 ft. in height.

On the side next the road is chiselled "1857-1907" and the following inscription "To the Founders of S.S. No. 11, Artmesia, whose courage, honest intention and stability of purpose converted the primeval forest into homes for themselves and those that came after them. Erected by their descendants," while at the base is cut in large letters the one word "Pioneers."

On the sides of the monument are inscribed the names of those who formed the first settlement. These names are:—

J. Boland, and Joan	his	wife.
W. Buchanan and Matilda	"	"
J. Chadwick and Elizabeth	"	"
C. Carson and Mary	"	"
Mrs. Cooey.		
D. Campbell and Joan	"	"
T. Gilbert and Rosanna	"	"
A. Graham and Elizabeth	"	"
T. Greggston and Eliza	"	"
J. Holley and Hannah	"	"
W. Hall and Mary	"	"
J. Jones and Agnes	"	"
T. Kells and Sarah Ann	"	"
W. Knight and Sarah	"	"
T. Lackay and Margaret	"	"
J. Lamos and Mary	"	"
A. Melvin and Ann	"	"
R. Smith and Eliza	"	"
W. Smith and Mary Ann	"	"
R. Shannon and Eliza	"	"
A. Sewell and Ann	"	"
J. Teets and Eliza	"	"
R. Warling and Sarah	"	"
J. Williams and Mary	"	"
J. W. Weber and Margaret	"	"

How the Monument was Paid For.

The total cost of the monument was about $200. The money was raised, as has been said, by voluntary subscriptions among the descendants of those whose names are inscribed on the granite. These descendants are scattered far and wide, and in some cases it was necessary to write to the mayors of foreign cities in order to obtain addresses, "but not in one single case," said Mr. Boland, "did we meet with a refusal to contribute to the assessment levied; in all cases the response was prompt and generous."

Reminders of the Old Times.

On the grounds was a large collection of utensils, which called back memories of the old days. The flax spinning-wheel used by Mrs. Buchanan, mother of William Buchanan, was one of the most interesting items in the collection. Brass candle-sticks made in England, rude ox yokes made from the primeval forest by the settlers themselves, a broad-axe, a frow for the splitting of shingles, and reaping hooks, were among the other articles on exhibition.

We believe this worthy act of the descendants of the pioneers of S.S. No. 11, Artmesia, of which all must heartily approve, is the first of its kind in the rural school sections of the Province, and it is to be hoped that it may be a "pioneer" movement which will be imitated in many other sections, thereby showing that, though the old settlers have passed from earth, they still live in the affections of their children, and proving abundantly "To live in hearts we leave behind is not to die."

APPENDIX N.—COUNTY MODEL SCHOOLS.

Report by J. J. Tilley, Inspector.

County Model Schools were established in 1877, and since that time, 38,975 students have been trained in them, and 36,409 Third Class certificates granted. The term extends over 14 weeks, with an additional week for the final examination.

Limit of Third Class Certificates.

Third Class certificates, which are valid for 3 years, were at first limited to the counties in which they were given, but Inspectors were allowed to endorse them, and thus to make them valid in their respective counties.

In 1881, the Hon. Adam Crooks made these certificates provincial, and soon after this, power was given to County Boards of Examiners to extend or renew Third Class certificates, which virtually removed the time-limit of 3 years.

Compulsory Professional Training.

Until County Model Schools were established, professional training for teachers had not been compulsory, and although the Toronto Normal School had been established for 30 years, and the Ottawa Normal School about 5 years, and although special grants had been made for several years to students attending these schools to assist in defraying their expenses, of the 6,488 Public School teachers then engaged in the Province only 17 per cent. had received any professional training. Requiring such training for all teachers was a great step in advance, and to provide for it easily, local training schools, with a short term, were established throughout the Province. The wisdom of this step could not be questioned; for to have required Normal School training for all teachers at that time would have been impracticable.

This method of training was regarded as a tentative, not as a permanent measure. It was considered a simple and inexpensive way of providing teachers with some training for all Public Schools. I know whereof I speak for, as a member of the Central Committee which recommended the plan, I took an active part in framing the regulations under which Model Schools were established.

Why Considered Temporary.

It was fully expected, however, that the sphere and duration of the certificate being limited, the young teacher would not rest satisfied with this grade of certificate, but would at the end of three years or sooner, go forward to a Normal School to obtain a life certificate valid throughout the Province. It was also expected that the holders of such certificates would be more sought for by trustees and would be more likely to remain in the profession, and that the proportion of Second Class teachers would thereby be increased.

It was found in practice, however, that but little difference in salaries in rural schools was made between Second and Third Class teachers, and this fact, with the removal of the restrictions of which I have spoken, caused a large majority of Third Class teachers to be satisfied with their standing during the short time they expected to teach rather than to incur the expense of attending a Normal School.

Proportion of Third Class Teachers.

In proof of this we find that, though the average number of Third Class certificates granted per year is over 1,200, the average number attending the Provincial Normal Schools is only 300; and this ratio continues from year to year. Thus it is seen that only one-fourth of our Third Class teachers go forward for Second Class certificates; or, to put it in another way, 75 per cent. of all those trained in Model Schools receive no further training. We find in addition that of the 5,214 rural schools in the Province 73 per cent. are taught by Third Class teachers, or by those with a lower grade of certificate as District or Temporary. We find also that of the 5,694 teachers employed in the rural schools, 3,835 or 67 per cent. hold only Third Class certificates or lower, 1,693 have Second Class certificates, while in this, the banner Province of the Dominion, there are only 143 First Class teachers in the rural schools.

In this connection it may be said that the average age of students in County Model Schools is less than 19 years, and, however unpleasant the admission, it cannot be denied that our schools are passing very largely into the hands of boys and girls. Inspector Fotheringham of South York, in a recently published report, says:—"Young people of 18 years of age are in most cases unaware of the best methods of developing and maturing character, not being matured themselves; and yet into their hands, in many cases, the raw material of complicated and varied possibilities is placed."

Length of Service.

The time during which they teach is also very short. The last report of the Minister of Education gives 4.7 years as the average length of service by teachers in rural and village schools. The effect of this waste is what it would be if at the end of less than every 5 years all these teachers were to retire in a body and give place to those who had had no experience whatever. Surely no progress could be made by our country if at the end of every 5 years all our professional men, our business men, our artisans, our farmers were to retire from their varied callings in life and give place to novices.

Summary of Conditions.

To tabulate the difficulties under which rural schools are conducted we find:—

(1) That 75 per cent. of all Third Class teachers receive no other training than that given in a 14 weeks' course in County Model Schools.

(2) That 73 per cent. of all rural and village schools are taught by teachers of this grade.

(3) That the average age of those who receive Third Class certificates is under 19 years.

(4) That a large majority of these teachers do not teach more than 3 or 4 years.

Under these conditions it need occasion no surprise if the opinion obtains that during the past 25 years the progress made in our rural schools has not been all that could be desired.

These conditions should cause every friend of education to reflect and to feel it his duty to seek to hold up the hands of any one who tries to deal with them courageously and to provide a remedy.

Term of Training too Short.

That the present system of training Third Class teachers is quite too limited has long been recognized by every one familiar with it. The Public School Teachers' section of the Provincial Educational Association, the Training Department, which consists of Normal and Model School teachers, and the Public School Inspectors' section have all put themselves on record by resolution, affirming that the Model School course is too short to produce satisfactory results. That is, those who had received the training, those who had given it, and those who had inspected the results all agreed that the term should be extended; and I have recommended this in several reports, believing it to be necessary and feasible.

Difficulty in Lengthening the Term.

When, however, the Normal School term was lengthened, in 1903, to a school year, a very great difficulty was placed in the way of lengthening the Model School term. A third Normal School having been established in London, there were 3 well-equipped Normal Schools in the Province, whose function it was to provide permanent provincial certificates. If the Model School term were lengthened to a year, as was generally recommended, the increased cost to the student would in justice demand that the duration of his certificate should be extended to at least 5 or 6 years, and it is doubtful if any good reason could be given why it should not be permanent. We should then have two classes of schools giving almost virtually the same class of certificate, and under these conditions, with the short time teachers remain in the profession, and the nominal difference between the salaries paid to Second and Third Class teachers, the only probable result that could be expected would be that very few teachers would go forward for Second Class certificates, and that the Normal Schools would be almost deserted.

No reasonable person would claim that the remuneration received by Second Class teachers would warrant the cost in money and in time required for a two years' course of professional training.

Another Difficulty.

A greater difficulty was placed in the way of extending the Model School term when the revised programme of studies for Public Schools was introduced in 1904. The Hon. Mr. Harcourt wisely sought by this programme to give something of a vocational as well as a cultural side to school work which is now being provided for by all progressive countries. It was carefully prepared by the Department in 1903 and then given over for a year to a committee of educational experts to make such changes or additions as they thought best. It was finally adopted by the Provincial Educational Association and given to the Province. Perhaps the chief purpose of this revised programme was to cultivate and to develop the perceptive and constructive powers of the child which had received but little attention in the past.

To this end Nature Study, Art, Manual Training, and Home Science, of which I shall speak later on, were to be taught, but as the teachers had received no instruction in these subjects, except in Drawing, it is needless to say that very little has been accomplished along these lines. If satisfactory work is to be done, the teacher must first be thoroughly trained. To furnish this training only in Normal Schools would be, as has been shown, to provide for only one-fourth of our teachers, and to furnish it in Model Schools as at present organized, would be simply impossible.

To make the necessary provisions for giving the training in these schools would necessitate:—

(1) That the term be lengthened.

(2) That separate rooms be provided for Manual Training, and Home Science.

(3) That the necessary equipment be furnished for each room.

(4) That special teachers qualified to give instruction in these subjects be engaged.

There are 56 Model Schools in the Province, and the average number of students per school is 23, so that if the training in these new subjects were given in the Model Schools, it would be necessary to incur the expense of providing the additional accommodation, equipment and special teachers in each of 56 centres for 23 students. No business man would entertain such a proposition for a moment, even if the number of Model Schools were reduced, say to 35 or 40.

If the training was to be broadened, the need of which had long been felt and was often expressed, and all the subjects of the new programme provided for, there was but one feasible course to pursue, which is the one proposed, namely, to bring all the students into a few central schools provided adequately as to accommodation and equipment, to give them a year's course of training under a full staff of competent instructors for all subjects and then reward them with provincial life certificates, after they had given evidence in practice of their ability to teach and manage a school.

Effect of Increased Cost.

I know it is claimed that many who under present conditions would become teachers will be prevented by the increased cost and time required from taking the new course prescribed, and that the necessary supply of teachers will be unduly diminished at a time when teachers are not plentiful. When Model Schools were established and professional training required for all teachers, the same difficulties were anticipated and the same objections raised. These objections were short lived and soon forgotten, and I have no doubt that the wisdom of what is proposed, though now questioned by many, will soon be as fully established in public approval as was the compulsory training in County Model Schools. If the change had been made 10 years ago when the supply of teachers was far in excess of the demand, it would have been easier of introduction. Transitions are always more or less troublesome. There are always those who are opposed to change, and who, in practice at least, are satisfied with the present and do not wish to advance. But when we reflect upon the conditions of which I have spoken, and realize that after our school system has been in operation for more than 60 years, less than 30 per cent. of our rural teachers hold only Second Class certificates and that the number of First Class teachers in these schools is only 2½ per cent. we should conclude that the time has fully come when an advance should be made in order that the work done in public schools may be kept in touch with the spirit of progress seen on every hand.

Evidence of Progress.

In Agriculture, the cradle and scythe gave place to the reaper, the reaper to the self-rake, and the self-rake to the binder. The manufacturer finds it necessary every few years to remodel his machinery or consign it to the scrap-heap and to replace it with new or improved patterns in order that he may compete successfully in the markets of the world.

These changes may necessitate immediate expense, but they produce ultimate gain. The business man who conducts his business along the lines of 25 years ago will go to the wall through the competition of his more advanced rival. In professional life the same spirit of progress is found. As late as 1871 no test was required for the Druggist, then a one-term course of lectures was prescribed, and now there are two terms with an examination to be passed at the end of each term. It is well within the memory of the present generation when no license to practise medicine was required. The medical schools have extended their training until now a 5 years' course is necessary to obtain a degree, with an additional examination and license by the Medical Council.

The day of the "local" preacher, so serviceable and acceptable in pioneer times, has almost passed away, and the ordained minister has taken his place. The qualifications prescribed for the latter in order to enter the ministry are being increased from time to time. The Methodist Church now requires University Matriculation as an introduction, with an attendance of 3 years at college and 2 years of probationary work. The Presbyterian Church prescribes a 6 years' course as the minimum, and a 7 years' course with a degree in Arts is recommended to all. And so it is all along the line. If it is asked why are these increased qualifications required, there is but one answer, the public good demands them. And shall it be thought unreasonable after so many years of uniformity, that an effort should be made to bring the majority of our rural school teachers up to the standard required for Second Class certificates. If this involves some sacrifice on their part, it is not, as has been shown, exceptional or peculiar to the teacher. The welfare of the children for whom the system of education has been established demands it, and their claims are paramount. Private interest must always be subordinate to the public good. Schools are not made for teachers, but teachers are made for schools.

Salaries Should be Adequate.

It is claimed also that the salaries paid to Second Class teachers are not such as to warrant the outlay required to obtain Second Class certificates, and their is much in this contention. When the Act was passed fixing the salaries in rural schools on the basis of the ability of the sections to pay as shown by their assessed value, there was a general feeling of satisfaction among teachers and a hope that a better day had dawned for them. But it was found in practice, unfortunately, that the people were not ready to give effect to this scheme, and a plan of bonusing salaries paid by 40 per cent., under certain conditions, was substituted therefor. It is too soon to know what the effect of this bonus system will be. It is to be hoped, however, that trustees will avail themselves of it and place teachers' salaries well above the minimum township levy per section. If they do not, then the present scheme of a legislative bonus and a township levy must be revised, and indeed it may be found necessary that the cost of attending the Normal School shall be borne in part by the country. The Law which makes the increased cost of preparation compulsory on the teacher should secure such remuneration as will reward him for the expense incurred. It should not be compulsory on the one side and optional on the other.

Provision for Weak Sections.

There are, of course, portions of the Province in which the value of sections and of townships is so low as to render it very difficult, and in many cases impossible, to secure Second Class teachers, even with the special

assistance given by the Department. Provision will be made for these with a lower grade of teachers and a shorter course of training. It is to be hoped, however, that the mistake which was made in 1881, of making Third Class certificates provincial, will not be repeated, but that these certificates will be limited to the counties or districts in which they are given, and to schools designated by the Public School Inspector. Power might be given to the Inspector to make such certificates valid in his county for any particular school, for even in the older and wealthier counties there are often poor sections which find it very difficult to employ Second Class teachers, even with the aid of a township levy.

Why New Subjects?

It may be asked, however, why take on this revised programme which requires an extended course of training for the teacher? A satisfactory answer to this question requires some consideration. It has been well said that the great bulk of the population is to be trained for usefulness through the school system of the country. This training should prepare children not only to lead a worthy life, but should assist them to earn an adequate living; it should train them to be producers as well as consumers. As I have said, our schools are now asked to add a vocational quality to their work for which the traditional studies do not provide.

Changed Conditions.

Fifty or sixty years ago Canadians were almost wholly an agricultural people; now our manufacturing interests sustain one-seventh of the entire population of the Dominion. Our agricultural and our manufacturing methods have changed greatly during this period; our professional, our commercial, and our social life has also changed very much, and these changes necessitate changes in our courses of study and in our methods of teaching to meet the new conditions. To provide intelligently for these conditions, one should consider what are the leading callings in life upon which the youth of the country will enter.

What School System Should Provide For.

These may, I think, be included in four classes, and I do not mention them in the order of merit or of importance. They are:

(1) What are commonly known as the learned professions,
(2) Commercial pursuits,
(3) Manufacturing, and
(4) Agriculture.

For all these a foundation must be laid in the Public Schools, and during the first five or six years of pupil's school life all must be taught those primary studies which make for general intelligence; but after attaining to the age of fourteen or fifteen years some provision should be made to prepare pupils to earn a living along the lines of their special aptitudes in those departments of life upon which they will probably enter.

For the first class—the learned professions—ample provision has been made in our High Schools and Colleges. For commercial pursuits, commercial departments are formed in Collegiate Institutes and in many High Schools which are in charge of commercial specialists, and in the public

schools in many towns and cities particular attention is given to commercial training. It is for the training in manufacturing and in agriculture that we especially need to provide.

Canada is rich beyond the conception of most people in those natural resources out of which a great agricultural and manufacturing country is to be built up.

Importance of Technical Training.

Proper development of these resources cannot be accomplished by unskilled labor. The prosperity of our country is dependent largely upon the industrial efficiency of the farmer, the mechanic and the miner, and the history of older countries proves that the highest degree of industrial efficiency can be secured only through technical instruction of youth, based upon that general intelligence which it is the function of the school to insure. The age in which we live is essentially industrial. In past ages the struggles among nations were principally territorial, political or religious; today the contest is for commercial and industrial supremacy—the commercial being determined by the industrial. At the first World's Fair held in London in 1851, known as the Crystal Palace Exhibition, visitors from the different European countries were amazed at the superiority of Britain's manufactured products. They then understood the cause of her supremacy, and they said if we would compete with Britain we must learn from her, we must imitate her and develop more skill among our artisans. And on their return to their own countries they soon began to establish what are now known in a general way as technical schools, wherein artisans could be trained to develop greater and more varied skill. But this was not enough, and they devised and put into operation a system of Manual Training for boys in the public schools which might serve as an apprenticeship to the advanced training in the technical schools. The results have been eminently satisfactory to the nations adopting these systems of training. The greatest commercial success has come to those best equipped to earn it. Germany and France especially have complete systems of special training adapted to every form of industrial demand, and by their skill have been able not only to keep their own markets, but also to win a pre-eminent place in the markets of the world, and they are to day Britain's most formidable rivals. Indeed, it was mainly competition with Germany that aroused Britain to the necessity of providing technical instruction for her artisans. During the fiscal year 1902-3 over £1,000,000 was expended in England and Wales on technical education.

It is clearly seen that in the long run the most highly trained labor must win in industrial competition. This truth which involves so much is now recognized and acted upon by all the progressive nations of the world. And although not much has been done in our new country, yet a beginning has been made in the Toronto School of Practical Science, and the Technical School, in a similar school at Brantford, in a department of the Woodstock College and in the School of Mines at Kingston. From the excellent report of the Inspector of technical education for 1906 we learn that during the past four or five years Manual Training departments have been established in 38 schools, including the three Normal Schools. The training includes instruction in Drawing, Designing, Art, Clay and Paper Modelling, and working in wood and in metals. Boys are taught how to use tools correctly and in their proper order in relation to each other so that if they enter upon any industrial occupation they will have nothing to unlearn. In some

of the schools the work is carried up so as to include the use of drills, bandsaws and lathes. The value of such preparatory training in assisting boys to become efficient industrial units cannot be over estimated. It is needless to say that if this work is to be properly done the teacher must first be thoroughly trained, and Inspector Leake says: "Our Normal Schools are well equipped for doing work of this kind, and every student now leaving the Normal Schools is well prepared to carry on this elementary Manual Training." In this connection it may be said that the training is carried on conjointly with the ordinary school work, and the testimony from all places in which it is conducted is that it aids rather than retards the progress of pupils in their regular studies. I believe it may be predicted confidentially that within the next ten or fifteen years this instruction will be introduced into nearly every town and city in Ontario, and much of it can be given in ordinary rural schools.

Nature Study and Agriculture.

The farmer has a right to expect that in rural schools the children shall be taught not only the studies which make for general intelligence, but also those things which tend to awaken and retain the boy's interest in farm life, and which help to make him a skilled agriculturalist. The introduction of Nature Study is to assist towards these ends. The object is not so much to impart information as to lead the child to cultivate habits of careful observation and to draw lessons from what he observes. The various facts in physical geography which abound in the home surroundings should be studied objectively in their relation to farm life, the different kinds of plant food and the sources from which obtained, the germination of seeds, the respective values of sand, clay, humus, and of combinations of these as illustrated in the growth of flowers and grains in boxes in the school room, in the school gardens or in the fields, the various modes of seed distribution in plants, the usefulness of bees to fruit growers through their aid in the fertilization of flowers and so forth—all these and hundreds more will furnish useful lessons for those who may be expected to spend their life on the farm.

Why also should not children be lead to observe the foods and habits of birds and learn the usefulness of each to the farmer, the gardener and the horticulturist? The economic value of birds to man lies in the service they render in preventing the undue increase of insects, in devouring small rodents, in destroying the seeds of harmful plants and in acting as scavengers, and the value of this service cannot be over estimated.

Birds that are of very great service are often regarded by the uninformed farmer as his enemies and are treated accordingly. Some idea of the value of the hen-hawk and the owl to the farmer may be gathered from a test made by the U.S. Government. Out of 2,212 stomachs examined, the contents showed only 3½ per cent. of poultry or game birds, the remainder consisted of mice or other small mammals and insects. The crow also is usually considered a bird to be destroyed by the farmers, yet the contents of his stomach usually show only 10 per cent. of grain or fruit, 40 per cent. carrion and 50 per cent. worms, caterpillars and insects.

Dr. Merriam of the U.S. Department of Agriculture has estimated that in offering a bounty on hawks and owls, which resulted in the killing of over 100,000 of these birds, the State of Pennsylvania sustained a loss of nearly $4,000,000 in one year and a half, and naturalists affirm that if all the birds were destroyed, in less than 9 years it would be impossible to inhabit the earth on account of the myriads of worms and insects and so forth that would then exist.

Although agriculture in itself cannot be taught in the ordinary public school, yet it is not only possible but very desirable both educationally and as a means of making rural life more attractive, to give the instruction with an "agricultural tone," to encourage Nature Study and to illustrate the principles of elementary science in plant and animal life through examples familiar to our country children. And as manual training prepares the way for advanced technical instruction along specialized lines, so Nature Study, when properly conducted, will prepare and create a desire for more advanced instruction in agriculture. Towards this end, as has been said, but little has been done through our school system. Six High Schools have recently been selected and extra grants made to assist in giving special attention to this subject. These schools, it is presumed, will serve as preparatory to the Agricultural College at Guelph, and it is to be hoped that the success and popularity of that institution, which have been achieved through the excellence of its work and by bringing this work directly in contact with the people, may in like manner be achieved by these schools. If so, the time will soon come when in every county at least schools or departments of schools will be established in which preparatory if not advanced instruction in agriculture will be given, and to which boys of 14 or 15 years and over, who have ceased to attend the public school, can have easy access during the winter months. Such schools would serve as secondary schools for farmers, and the work need not necessarily be limited to instruction in agriculture, but might very properly include Manual Training, Home Science and some ordinary academic work, in the benefit of which both boys and girls might share. In connection with such schools a lesson may be learned from the neighboring Republic. The Minnesota School of Agriculture was the first to make the experiment with a single school of this kind, centrally situated. The course covers three winters of six months each, leaving the students on the farm during the summer months. The school now has 500 students and its capacity is being doubled.

The North Dakota College at Fargo and University of Nebraska at Lincoln have followed this plan and each has an Agricultural High School with several hundred students. Wisconsin is a leader in agricultural instruction for pupils of High School grade. That State has County High Schools of Agriculture and Home Science to give instruction in these subjects, and in the usual High School branches. There are short winter courses for older boys and girls who are busy on the farms during the summer, and special work adapted to their needs is provided for them. At the last Session of Congress a Bill was introduced to appropriate $8,000,000 annually for industrial education in High Schools—half of the sum to be devoted to instruction in the mechanical arts and Home Economics in City High Schools, and half to instruction in Agriculture and Home Economics in Agricultural High Schools.

Home Science.

Home Science or Household Economics for girls, which has been well named the female partner of Manual Training for boys, merits more discussion than space will permit. I will simply say it is no "dress parade," no mere preparation of special dishes for 5 o'clock pink teas. While it aims to give thorough instruction in cooking, it also aims to instruct in the difficult art of choosing suitable, nourishing, and at the same time, economic articles of food, so that the smallest income may best be made to meet the needs of large families.

The course, however, is not confined to cooking or the kitchen; it deals with sanitation, lighting, heating, ventilation and beautifying the home, and aims to show how the latest results of scientific research may contribute to greater economy in the home, and to the better care of health and longer life. In short, it aims so to instruct the girls of our country that they may become thoughtful, intelligent, thrifty house wives, and not merely the victims of hard drudgery, as is too often the case.

If I have dealt upon these new subjects of study, it is for the purpose of setting forth their practical value in relation to the industrial affairs of life and to emphasize thereby the need of the proper training of those who will instruct the pupils; and, looking at the matter solely in the public interest, there seems but one conclusion possible, that this training can be given best in the Normal Schools, and that the course should extend over a school year.

In closing this report I wish to call attention to the faithful and efficient service of the Model School masters, most of whom will now discontinue this work, and from whom I part with very deep regret. Many of these gentlemen have devoted the best years of their lives to the training of teachers and during the Model School term they have not only been fully occupied with this training, but have been obliged to give much attention to the whole school and especially to the entrance classes which were put in charge of substitutes, who in many cases failed to retain the standard of the Senior divisions. None but the masters know how much their labours were increased in this way and few people realize how much the country is indebted to the teachers of Model Schools for the zeal and efficiency with which the large majority of our teachers have been trained by them during the past 30 years.

Some of them have also voluntarily incurred considerable personal expense in attending summer schools the better to prepare themselves for giving instruction to the students in these new subjects to which I have referred. Some Model School masters have been 15, 20, and even 30 years in this work, and it would seem to be only a graceful thing if their long services were recognized in some tangible way. Banks, insurance companies, and other institutions recognize and reward long, faithful service, and surely the country should not be less appreciative of its teachers who have rendered it such faithful service with but little extra remuneration.

APPENDIX O.—REPORT ON THE SCHOOLS OF CALIFORNIA.

As explained below Inspector J. H. Smith, of Wentworth County, visited the schools of California last year. He has been good enough to allow the Minister to publish the following interesting and suggestive account of the schools of that State.

THE REPORT.

Through the courtesy of the Education Department and the Wentworth County Council, I was granted leave of absence to visit the Pacific Coast in quest of health. While there I met a number of the foremost educators of the State of California, and soon became deeply interested in their work and the manner in which they did it. This led me to study somewhat carefully the leading features of their system, and to compare and contrast it with our own. I was very much impressed with their high ideals of popular education, and with their determination to carry these ideals into effect. The distinctive features of their system that merit special mention, are: the care taken to obtain an accurate record of all the children of school age resident in each district, irrespective of colour or nationality; the levying of a uniform rate of taxation over counties for the purposes of salary and equipment; and the very generous appropriations made by the Legislature for education. Each year these grants amount to fully fifty per cent. of the cost of maintenance. Reference to these will be made more in detail in the body of this report.

Synopsis of the School Law.

The governing bodies are: The State Board of Education; the County Board of Education: the City Board of Education; and the District Board of Trustees.

The State Board of Education is composed of the following persons: the Governor of the State, who is ex-officio president; the Superintendent of Public Instruction who is ex-officio secretary; the principals of the five state Normal Schools; and the President and the Professor of Pedagogy in the State University.

The duties of this board are: To adopt rules and regulations for its own government; for the government of public schools; for the government of district school libraries; and for granting and cancelling certificates of qualification as teachers. This board shall keep an official record of its proceedings, shall designate some educational journal as the official organ of the department of public instruction, and shall use a corporate seal to validate its proceedings.

There are 57 county boards of education in the State, and each of these boards is composed of the following members, the county superintendent of schools, and four members appointed by the county board of supervisors, a majority of whom shall be teachers. From these one member is chosen as President, the county superintendent being a member ex-officio and secretary of the board. They are allowed five dollars per day, and the same rate for mileage as the county supervisors.

These boards have power to make rules and regulations for their own government; to examine candidates for certificates; to grant four grades of certificates, high school, grammar school, kindergarten-primary, and

special; to revoke certificates for cause; to adopt a list of books and apparatus for district libraries; to prescribe and enforce a course of study, and the use of a uniform series of text books in the public schools; to keep a record of their proceedings; and to authenticate their acts with a corporate seal.

The number of trustees for any school district shall be three. In cities the number is fixed by the charter of the city. The annual election day is the first Friday in June, and the trustee-elect enters upon the duties of his office on the first day of July following. The voting must be by ballot, and the term of office is for three years.

The charters of the different cities contain certain special provisions relating to the matter of education, but the state school law defines the powers and duties of all boards of trustees, or boards of education in cities as follows:

To prescribe rules for their own government, and for the schools under their jurisdiction; to transact all business at regular or special meetings; to manage and control all school property; to build schoolhouses; to employ teachers, janitors, etc.; to rent, furnish, and insure all school property; to expel and suspend pupils; to enforce the prescribed course of study; to appoint a census marshal; to report annually to the county superintendent of schools before the first day of July in each year; to visit schools once each term; to call meetings of ratepayers in districts for certain purposes; to furnish all supplies; to keep the school open for eight months in each year; and to pay all state moneys to the teacher.

The school officials are: the Superintendent of Public Instruction; the County Superintendent of Schools; and the Census Marshal.

The duties of the Superintendent of Public Instruction are:

To superintend the schools of the State; to report to the Governor of the State biennially, on or before the 15th day of September; to apportion the State school fund, and to furnish an abstract of such apportionment to the State controller, the State board of examiners, and to the county auditors, county treasurers, and county superintendents of schools, throughout the State; to prepare educational blanks; to have school laws, printed and distributed; to visit orphan asylums; to visit schools in the different counties; to report to the controller on or before the 10th day of July in each year, the number of children in the State between the ages of 5 and 17; and to call a biennial convention of the county and city superintendents.

The duties of County Superintendents are:

To superintend the schools of his county; to apportion the school moneys to each school district; to visit and examine each school in his county, at least once each year; to issue temporary certificates when and where necessary; to distribute all laws, reports, circulars, instructions, and blanks which he may receive for the use of school officers; to keep a record of his official acts, and of all proceedings of the county board of education; to approve of, or reject plans for school houses; to appoint trustees to fill vacancies until the first of July following, and to appoint trustees in new districts; to appoint janitors under certain circumstances; to report annually to the superintendent of public instruction; to grade schools in the month of July each year; to require the trustees to make necessary repairs; to report the number of children between 5 and 17 in his county, to the superintendent of public instruction, and to the board of supervisors in his county; to receive necessary travelling expenses, not to exceed $10 per annum for each district in his county; to follow no other vocation unless his salary is less than $1,500 per annum.

The Census Marshal is appointed by the local boards of trustees in each district, and by boards of education in cities and towns. His duties are: To take annually between the 15th and 30th days of April a census of all children under 17 years of age, who were residents of his district on said 15th day of April; to report the results to the superintendent of the county schools on or before the 10th day of May in each year. This report shall contain the number, age, sex, color, name, and nationality of the children listed, and whether there are any that are deaf or dumb, the names of the parents or guardians and their residence, the number of children in each house not vaccinated, and such other information as may be required by the state superintendent. The census marshal shall have power to administer oaths.

The law makes the following provisions regarding public education: That every public school must be open for the admission of all children between the ages of 6 and 21, residing in the district; that these schools shall be classed as High, Technical, Grammar, and Primary with Kindergarten classes; that all schools shall be taught in the English language; that county boards of education shall provide for a final examination for pupils who have completed the course of study in the grammar and primary schools, and shall grant graduation diplomas to the successful candidates; and that instruction in the following branches: reading, writing, orthography, arithmetic, geography, nature study, language and grammar, with special reference to composition, history of the United States, civil government, elements of physiology and hygiene, with special reference to the effect of alcohol and narcotics on the human system, music, drawing, elementary book-keeping and humane education.

County boards are responsible for the preparation of a course of study and for the selection of the subjects to be taught in the county schools. While the Legislature specifies in general terms the subjects to be taught, the county boards outline these subjects in detail, fix the amount to be taught each term, and specify the number of periods each week, to be devoted to each subject. The course covers a period of nine years, four in the primary, four in the grammar grades, and one for review, or for taking up certain subjects in the high school course. This completes the work of the public school.

Teachers are engaged at a certain salary per month, and must file their certificates with the county superintendent of schools, before entering upon their duties, and must inform him of the date of opening and closing school, giving one week's notice of the latter. Experienced teachers are required to be placed in charge of the primary grades in schools having more than two teachers, and they shall rank in point of salary with the highest grade of assistant teachers in the grammar schools.

Five classes of certificates can be issued to teachers; kindergarten primary, grammar school, high school, special, and temporary. These certificates are granted upon credentials alone; upon credentials supplemented by an examination; and upon passing certain prescribed examinations both oral and written. Certificates issued by the State board are valid throughout the State, and may be made permanent upon certain conditions. County board certificates are valid for six years in the county where issued, and may be renewed without examination. Upon complying with certain conditions these certificates may be made permanent.

The public schools are supported by grants from a state school fund, a county school tax, and a district school tax. The State school fund which corresponds with our legislative grant, consists of moneys obtained from the following sources: (1) a property tax, being a uniform rate levied on the assessed value of the entire state; (2) a poll tax of $2 per head on each male of 21 years or over; (3) a property tax on railroads; (4) a tax on collateral inheritance, which corresponds in the main to our inheritance or succession duties; (5) interest on permanent bonds held in trust (this money was obtained from the sale of school lands, and certain grants made by the Federal Government when California became a State, and some special grants made since that time); and (6) interest or rent on state school lands. The financial year closes on the 30th of June, and the legislative grants are apportioned in July and January of each financial year.

For the year ending 30th of June, 1906, the property tax amounted to $2,865,748.76; the poll tax, $604,677.50; the property tax on railroads, $129,167.36; the tax on collateral inheritance, $250,000; the interest on permanent bonds held in trust, $214,185.18; interest or rent on State school lands, $29,012.49; making a total legislative grant of $4,092,791.29.

The method of apportioning the State fund is as follows: The State is divided into 57 counties; each county is divided into school districts; each school district has a census marshal, who makes a careful enumeration of all the school children between the ages of 5 and 17 residing in the district. These are known as census children. The census marshal sends his report to the county superintendent. Then under the present law, the census of each district is divided by 70, which gives the number of teachers allowed to that district; for each district is allowed one teacher for each 70 children of school age, (5 to 17), and for each fraction of 70, not less than 20. In districts having less than 70 census children, no matter how small the number, one teacher is allowed for each such district. The number of teachers allowed for the several districts in a county is reported to the State superintendent, by the county superintendent at the time of reporting the census.

In the apportionment of the State school fund in January, 1906, $250 was granted to the several counties for each teacher allowed by the number of census children. This required $1,951,000.00, which left a balance of $2,141,691.59 of the State fund, to be distributed upon the basis of attendance, leaving a surplus of $99.70 to be apportioned in 1907. The total average attendance as reported by the county superintendents for the year ending June 30th, 1905, was 217,873. This divided into the balance of the State fund gave a grant of $9.83 for each census child, for that year. The State grant, therefore, consisted of a special grant of $250 for each teacher in each district, and the sum of $9.83 multiplied by the number of census children in each district.

The county school tax is a uniform rate levied by the board of county supervisors, upon the assessed value of the property in the county. The amount of this tax is fixed by the county superintendent, and is based upon the number of teachers allotted to the county by the number of census children. The minimum sum must not be less than a sum equal to $7 for each census child in the county, in any one year, nor to exceed fifty cents on the hundred dollars of assessable property.

The board of district trustees, with the consent of the ratepayers may in any one year, vote a sum of money not to exceed thirty cents on the hundred dollars of assessable property, for ordinary purposes, or seventy cents on the hundred dollars, for building purposes in any one year. All votes under the school law are taken by ballot. All county rates and all district rates are levied by the county supervisors.

State Publication of Text Books.

By the adoption of the "Perry Amendment" to the constitution of California in 1884, provision was made for the publication of text books for schools by the State. This power was delegated to the State board of education by the legislative act of 1885. Eight different books were originally published, in editions of a few thousand each. Now there are fifteen books with editions reaching in some cases to 100,000 copies of a single book. The state series at first consisted of three readers, one speller, one arithmetic, one grammar, one history of the United States, and one geography. In 1887 four new books were added to the list, a primary text book in each of the subjects of arithmetic, language and geography, and a treatise on physiology and hygiene. An elementary book on "civil government" was prepared, and published in 1891, and it is still the authorized text book on that subject.

The State text books failed to meet the reasonable expectations of the public, for the books themselves gave evidence of want of skill in their preparation, and were neither pedagogical nor modern. Crude in form, incorrect in statement of fact, and a lack of attractiveness in their general make-up, increased the difficulties of teaching from them, and lessened the interest of the pupils in their studies.

The promoters of State publication had promised great reduction in the price of school books, but the results proved to be quite unsatisfactory, for instead of being lessened, the cost to the school patrons had been very materially increased. So great had the dissatisfaction grown, that, in 1893, the teachers of the State almost unanimously urged the revision of the text books, or the abandonment of State publication altogether. This agitation brought about a revision, and the addition of a new reader. This change, however, did not allay the dissatisfaction. The defects were inherent in the system, or rather in the manner in which the system was administered. The text books were prepared by California writers who were innocent of pedagogical knowledge, and the finished product of their skill did not reach a very high order of excellence. In the class room, teachers found their work greatly hampered, by reason of the inferiority of the text books they were, by law, compelled to use. So general was the dissatisfaction throughout the State, that teachers' institutes and conventions of county superintendents passed resolutions condemning these books as inferior in plan and content, while the mechanical work reflected no credit on the art of the book maker.

The effect upon the schools was of such a serious nature, that county boards of education were forced to seek some means of relief. This they found in the fact, that they had power to introduce supplementary text books into schools for the use of pupils, as a part and parcel of the school library. Parents were required to purchase the State text books, but the library was paid for out of the public funds. This made supplementary text books popular with the parents, and they soon began to supersede the State text books. As a rule no two schools adopted the same series of supplementary text books,, for the agents of eastern publishers pushed their sales with vigor. It was not long, therefore, until confusion reigned where uniformity and order should have prevailed. What was intended to overcome the difficulties of the State system of text books, in itself became an obstacle to progress.

These conditions lasted from 1893 to 1903, and it was during this time that the educational system passed through its most critical period. In the State board of education was vested the authority to publish all text books. This board consisted of nine members who resided far apart, and it not unfrequently happened that some of the members were very irregular in their attendance. In this way the responsibility was so unevenly divided that in the end this plan proved a practical failure. In 1903 the State legislature changed the law, and made the Governor of the State, the State Superintendent of Education and one member appointed by the State board of education a committee to look after the question of text books. Their duties were defined by statute, and their official acts were to be valid and binding on the State only after approval by the State board of education.

This text book committee employs a number of critic readers to determine the practical value of the books submitted, and those approved by the critic readers are usually selected by the committee. This system has been in operation since 1903, and as a result of the work done by this committee a complete new series has been prepared for the use of the schools. These text books are sold to the pupils at cost price, which averages less than the retail price of eastern publishers. The retail price of the State text books is very nearly the same as the wholesale price in the east.

For the information, regarding the State publication of text books, I am indebted to an article prepared by Mr. Robert Furlong, secretary of the text book committee, who has given an impartial review of the work done since the inception of the scheme.

The following are the retail prices of the revised new series of State books, as fixed by the State board of education, for the school year ending June 30th, 1903.

Primer	20 cts.	First reader	24 cts.
Second reader	28 "	Third reader	42 "
Speller	19 "	Arithmetic, Jr.	28 "
Grammar school arithmetic	50 "	English lessons, part I	28 "
English lessons, Part II	46 "	Introductory history	45 "
Grammar school history	81 "	Geography primary	55 "
Grammar school geography	98 "	Physiology and hygiene	41 "
First reader revised	16 "	Fourth reader revised	53 "

Speaking from my own personal observation of these books, as seen in the schools in different parts of the State, I may say that I was not favorably impressed with either the subject matter of the contents, or the gradation and arrangement of the material. The mechanical work was not up to the standard of what a good text book should be, for the paper, the binding and the printing were not of a high order of excellence. These books seemed to me to be defective in the selection of the subject matter and of its adaptation to the educational requirements of the pupils for whom it was prepared. Many things that from my point of view, seemed unimportant, found a place in these books, and things of primary importance were touched upon very lightly. The difference between essentials and non-essentials was not clearly defined. The writers or compilers of these books failed to recognize the essential elements of the subject from the point of view of the learner, and too frequently the subject matter was burdened with technicalities that caused the pupils to cram without obtaining ever a moderate grasp of the essential elements of the subject.

From conversations with a number of the leading teachers, and some of the county and city superintendents in different parts of the State, I arrived at the conclusion that State published text books did not, in the opinion of

these people, meet the requirements of the schools. In fact, in several instances, more censure than praise was given. There are many and serious difficulties surrounding the problem of furnishing suitable text books, but State publication as it exists in California at present is not the best solution.

The following statistics are compiled from the report of the State Superintendent of Public Instruction, for the year ending June 30, 1906.

Number of census children in the state, (5 to 17)	White	430,005
" " " "	Negro	3,317
" " " "	Indian	3,371
" " " "	Mongolian	4,224
Total		440,917
Number of census children attending school	(public)	321,870
" " "	(private)	43,080
" " "	(no school)	75,967
Total		440,917
Number of districts in the state		3,327
Number of teachers allowed on census of each district		8,100
Number of teachers actually employed	(male)	817
" " " "	(female)	7,195
Number of children enrolled in primary and grammar grades		294,939
Average attendance, daily		224,660
Number of school houses, brick, 165; stone, 8; adobe, 10; wood, 3,642. Total		3,825
Average rate of county school tax, on the $100.00		.26

The following are the receipts and expenditures for the State for the year ending June 30th, 1906.

RECEIPTS.

Balance from 1905	$2,329,252.95
State school grant	3,880,740.82
County school tax	3,179,964.81
City or district tax	501,474.87
Sale of bonds	1,426,596.06
Miscellaneous receipts	176,640.78
Total	$11,494,670.29

EXPENDITURE.

Teachers' salaries	$5,666,045.33
Contingent expenses	1,480,097.32
Buildings and sites	1,474,716.24
Libraries and equipment	106,149.54
Total	$8,727,008.43
Cost per pupil, based on number enrolled	$17.60
Cost per pupil, based on average daily attendance	$19.21

From observations made regarding the working of the school system of California, as well as from discussions with many of the leading educators, who are practically connected with the state schools, I have formulated the following propositions as worthy of consideration in any movement for the improvement of our own system. Briefly stated they are: (1) the appointment of a census marshal in each rural school section, and in each urban district; (2) the appointment of a truant officer for each municipality repre-

sented in the county council; (3) the formation of a county board of education; and (4) the levying of a uniform rate over the entire county, for the creation of a fund to be known as the salary and equipment fund.

The census marshal shall be appointed by the trustees in rural sections, and by boards of education in urban municipalities. His duties shall be: to take annually between the————————day of————————, and———— day of————a census of all children under————years of age, who were residents of the section on————————day of————; and to report the results of this census to the county inspector of schools on or before the———— day———— . This report shall contain the number, age, sex, colour, name, and nationality of each child listed, and whether any are either deaf or dumb, the names of parents of guardians and their residence, the number of children not vaccinated, and such further information as may be required by the Minister of Education. He shall have power to administer oaths when and where necessary, and shall keep a record of them.

The truant officer shall discharge such duties as may be assigned to him by statute, or by regulation of the board appointing him.

The county board of education shall be composed of the warden of the county, who shall be chairman, the P. S. Inspector or Inspectors, one of whom shall be secretary, the member or members who represent the county in the Legislature, and two teachers of experience appointed by the county council.

The powers and duties of the county board of education may be defined as follows: to have the general oversight of the public schools of the county; and to make rules and regulations for their government, subject to the approval of the Education Department; to prepare or cause to be prepared a course of study adapted to meet the educational needs of the county; to fix the amount of money to be raised by a county rate for the salary and equipment fund; to appoint truancy officers and define their duties; and to discharge such other duties as may be required of them by the acts of the Legislature.

The salary and equipment fund shall be under the direction of the county board in all rural schools, and under the Board of Education in all urban schools. It shall consist of the county or city school tax, and the Legislative grant on salaries, certificates, and equipment, and shall be apportioned among the schools on a basis fixed by the Education Department or the Legislature.

All of which is respectfully submitted,

J. H. Smith, I.P.S.
Wentworth County.

Continuation Class Laboratory, Drayton, Ont.

APPENDIX P.—REPORT OF THE INSPECTOR OF CONTINUATION CLASSES.

To the Honourable R. A. Pyne, M.D., LL.D.,
Minister of Education of the Province of Ontario,
Education Department, Toronto, Ontario.

Honourable Sir,—I have the honour to submit herewith my report on the Continuation Classes of the Province of Ontario for the year ending December 31st, 1907.

I have the honour to be,
Sir,
Your obedient servant,
R. H. Cowley.

January 15th, 1908.

REPORT OF THE INSPECTOR, 1907.

This report is confined to classes of the highest grades,—those to which at least one teacher gives whole time. Reference to other grades is omitted as they are Continuation Classes in name only, being restricted by force of circumstances to a course no higher than that of the fifth form of public schools.

Owing to the care and promptness of the principals, statistics are given complete to the end of 1907. These statistics indicate that the past year has been one of unusual growth. Considering, too, the hearty spirit in which the school boards are meeting the requirements of the new regulations, the success of Continuation Classes, at least in their external aspects, seems already assured. The present basis of grants places such a class within reach of almost every settled part of the Province not included in a high school district. The step next in order, and of greater ultimate consequence, is to develop an aim and arrange a course of study serviceable to the best interests of the future citizens who will be trained in these classes.

Education for Rural Life.

The circumstances set forth in my report for 1906 and further confirmed by the conditions observed during the past year indicate the lines along which the development of a distinct aim and the attendant modification of the course of work should proceed.

Of the 4,744 pupils enrolled in 1907, 1,918, or 40 per cent., come from farm homes. Of those who left school during the year, only 175 pupils, or 15 per cent., returned to the farms. Assuming that the number of those who left during the year includes a due proportion of pupils from the farm, the figures indicate that for every three pupils from the farm who attend the Continuation Classes only one returns to the farm. Such results as these suggest that thus far the Continuation Class must take its place side by side with the high school and the Collegiate Institute as an avenue of exodus from farm life.

Many of the new and constructive occupations that are continually resulting from the steady progress of science and invention have their headquarters in the cities. To these it is natural, and perhaps not undesirable, that

country boys in fair numbers should be attracted. The training and experiences of their constant environment specially fit them for success in such pursuits. But making all allowances for these productive industries as an appropriate destination for country boys, and also bearing in mind the equally productive nature of agriculture and its transcendent importance to the whole Province, the conclusion is inevitable that the farm pays to the city a too great and unremitting toll of its best blood.

It is clear, too, that the cityward movement has been encouraged by the spirit of the schools. Up to the present the obligatory course of study is not even neutral in this respect. Not only are examinations for matriculation into the university and for entrance into teaching definitely provided for, but through long force of habit and circumstances these examinations have been a conspicuous end in nearly all the secondary schools of the Province. To some extent, too, special attention has been given in more recent years to commercial subjects. But up to the present year there has been nothing in the required courses to incline the student to think definitely or to think at all of farming as a desirable life work. On the other hand, there is much in the definite aim of the school and the long usage of the system to actually cause him to gravitate away from the farm. Undeniably, the schools have gone farther than providing a course for general culture;—they have given the student a distinct bias toward the professions, and intentionally also toward mercantile pursuits. The very fact that the graduates of rural schools have been forced to repair in most cases to the cities and larger towns to obtain secondary education has of itself constituted a long standing, serious and unadvisable discrimination against the progressive development of rural life.

In this relation we have come to the parting of the ways. Secondary education must be limited to the needs of general culture without bias toward any pursuit, or agriculture—our greatest productive industry—must receive its due share of encouragement through the practical and scientific courses of the secondary schools. To adopt the latter alternative would be to act in harmony with the recognized tendency of our school system and the general trend of educational opinion. Such a deviation from the traditional path of the rural school is requisite to a balance in the system of secondary schools. These now afford a convenient avenue to the colleges of arts, law, medicine, theology, dentistry, pharmacy, pedagogy,—in fact to almost every higher school of learning and practice except the Agricultural College. The latter alone is supposed to be the farmer's university, but it is really so little used by the country boy with a secondary education that it is forced to devote much of its energy to elementary non-technical work that should be overtaken in the usual preparatory schools.

Education toward the farm is further necessary to a proportionate development of our natural resources. It is necessary to a healthy balance between urban and rural populations, and to the maintenance of that interest in rural life which is a large factor in the sanity and vigor of the national spirit. In view, therefore, of past tendencies, present conditions and pressing needs, it is reasonably clear that if the work of the Continuation Classes is to serve the interests of the farming community it should gravitate definitely toward a rural aim.

A Course of General Value.

It does not follow that a course aiming to promote interest in rural life would be adverse to the requirements of any class of pupils attending the Continuation Schools. At present the pupils fall into three general groups:—

(1) Those preparing to enter teaching, (2) those preparing for a college course, and (3) those desiring a measure of general education. If the rural teachers are to be made competent to teach what the rural pupils should know, it is self-evident that the teachers had better learn these things while they themselves are pupils. Efficient Continuation Classes would thus be among the best places for the rural teachers to receive their preliminary academic instruction. Those rural pupils who still wish to enter teaching need not be dislodged by a modification of the course of work. Having given a proper course of work in line with the interests of rural life, their entering the teaching ranks will materially contribute to the progress of rural life, and the objection to these classes being used as avenues to teaching will cease to have weight.

As for matriculation, it may be assumed that the universities will follow their long established policy of accepting any reasonable equivalents for the standards of scholarship and training guaranteed by their own examination.

The pupil who attends the Continuation Class to improve his general education will reap the advantages of a course well balanced between subjects of theory and practice. The appeal to memory, reason, and imagination will be continually strengthened by concrete instances to a degree not possible under the present course.

The Typical Continuation Class.

While the Continuation Class is intended to be a sort of rural high school supplying a measure of secondary education to rural pupils, it should be borne in mind that the chief reason for using it as a means of education toward rural life is not to serve the immediate interests of the rural population as opposed to the interests of other sections of the population. The object is to meet the larger interests of the state, and this is all the more warrantable since it will contribute at the same time to the best education of the individual pupil, whether his ultimate aim be the farm, the college, or the counting-house. In other words, the work of the typical Continuation Class, as far as it goes, will be in line with that of the typical high school, the pupils of either being under no disability to acquire, if they will, a practical interest in the fundamental pursuits of country life.

The general features of the curriculum must therefore be (1) a fixed course for purposes of general culture; (2) a course of elementary agriculture and allied interests and (3) a course in the economics of the home.

To properly overtake such a curriculum a staff of two teachers would be requisite. Such a staff, prepared for the work, would be competent to conduct a general course of as high a standard as that now prescribed, at the same time taking up such phases of practical work as would develop a deep and intelligent interest in country life. The crowning fruit of such a system would be the eventual production of a rural population well informed as to the advantages of education, and therefore intent on maintaining efficient rural schools.

A Notable Departure.

In harmony with such a tendency and aim a step has recently been taken that is likely to prove the beginning of a close and helpful relationship between the Ontario Agricultural College and the school system of the Province. The opening of special departments of agriculture in six selected high schools, the appointment to these departments of six specially chosen

graduates of the Agricultural College, the initiation of this experiment under direct government approval and responsibility, and the evident public interest and sanction with which the experiment has thus far been attended are circumstances of more than passing importance to the entire educational system.

The heads of these departments are not only regular members of the high school staffs, they are also agents or representatives of the Agricultural College. An appeal to the common judgment of Boards of Secondary Schools that have for years been giving their pupils an impulse toward all the professions, and that have latterly sought to also develop commercial tendencies, will inevitably result in the equal recognition of so fundamental an industry as agriculture, now that the Provincial Government has marked its approval with unusual emphasis.

If it *is* wise to train the youth of the urban centres toward the farm, it is at least equally wise to provide similar training for those who are already on the farm, and the examples of this departure in the high schools may be followed safely and consistently in the Continuation Classes.

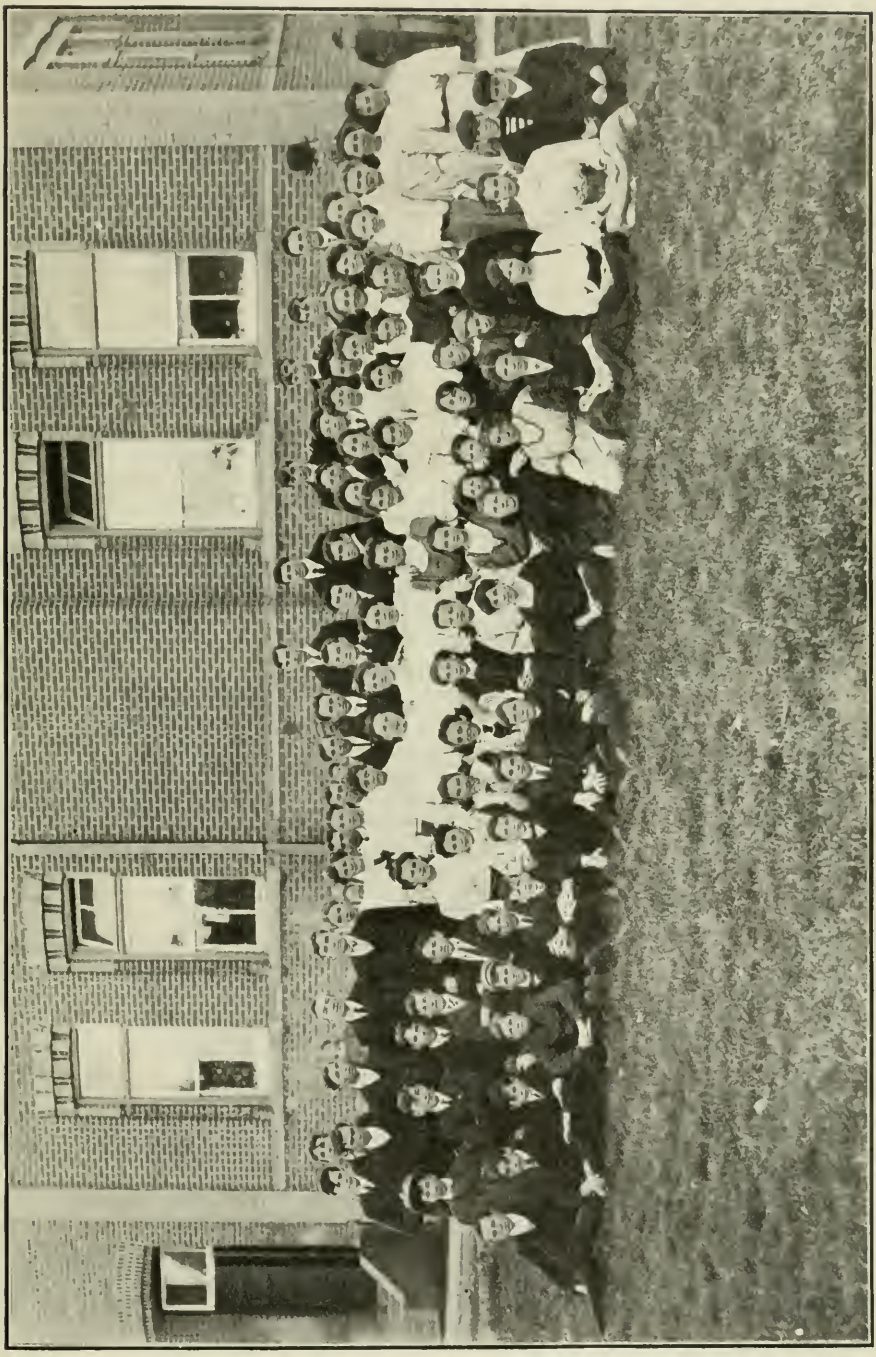
An Improved Curriculum.

The problem of the right curriculum is not to be solved by additions to the present course, but rather by a process of modification, elimination and substitution. There are excellent possibilities in the general outline of the curriculum as it stands, but many teachers have slavishly followed details which were intended to be illustrative and suggestive, but not restrictive. The dogmatic application of text books has been one source of trouble, failure to grasp principles another, lack of thoroughness in fundamentals a third, losing sight of the relative importance of subjects and parts of subjects a fourth. These defects have been aggravated on the one hand by inexperience, on the other by the restrictions of the examination system. But remedial agencies have been introduced. The new faculties of education in the universities may confidently be expected to effect a great improvement in the preparation of teachers, while the recently introduced system of approved schools should result in a material reduction of the evils attendant upon the examination system as it has been known in Ontario.

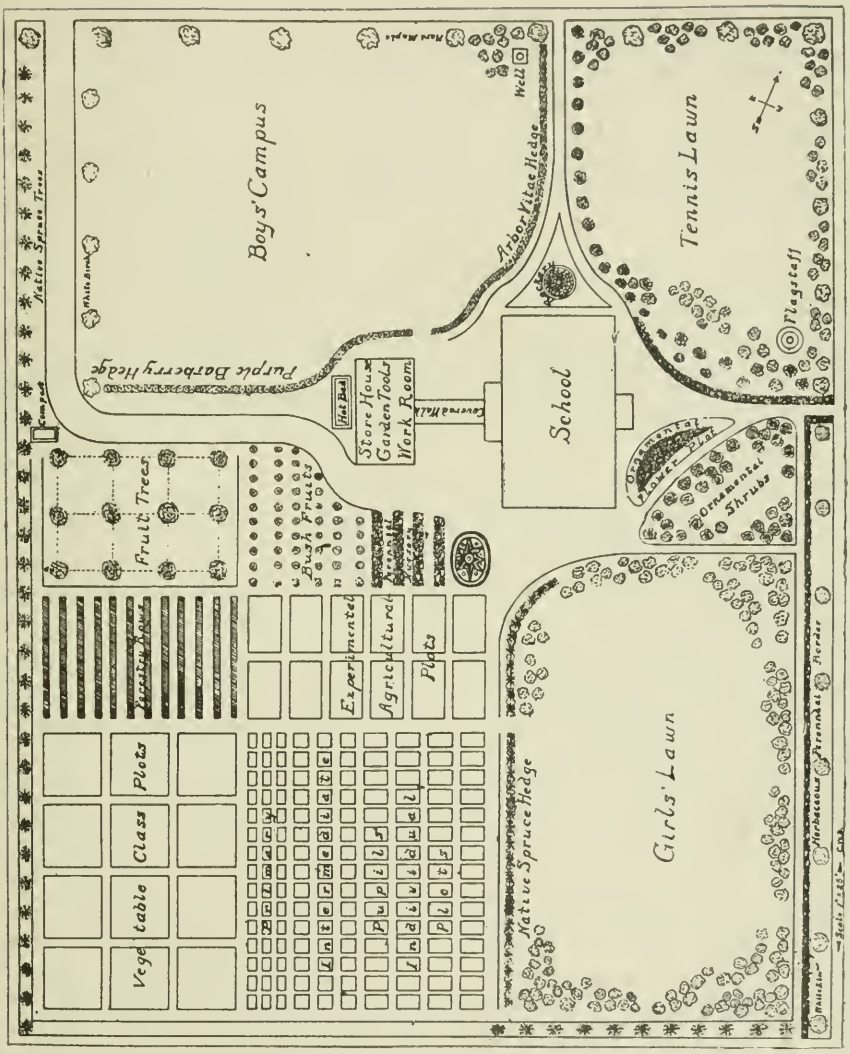
School Gardens.

Pending a careful revision of the curriculum in its general aspects some progress in the line of education for rural life may in the meantime be made. Few of the schools have thus far succeeded in entering into the spirit of the course in biology, or have attempted the special course in agriculture. Several reasons may be assigned for this limitation, the main one in the former instance being lack of preparation on the part of teachers. It would be in the interests of education to accept a course in school gardening in lieu of the prescribed biology. With little effort, any intelligent teacher could guide his pupils sufficiently in taking up such a practical course. The study of plants and animals in relation to the school garden would be a more natural, scientific and effective way of taking up the biology than that implied in the syllabus.

The potato plot is the best place in which to study the life history of the potato-beetle. The cut-worm, the tomato-worm, and the cabbage butter-fly may also be studied in their actual environment. The toad is a useful denizen of the garden and his life history may be substituted for that of the frog. There will be daily lessons in the functions of plants. The bird in the bush is worth two in the hand. The great virtue of taking up the



Continuation Class, Alliston, Ont.



Plan of School Garden and Grounds, Carp, Ont.

study of plants, animals, and soils in the school garden consists in the fact that it is all an incidental study, not a premeditated task. The inspiration of out-of-doors, the naturalness of dealing with things as they arise, the vividness of studying plants, and birds and insects in their proper presence enables a class to learn as much biology in one summer in the garden as it could overtake in two years by dealing with topics seriatim in an artificial way.

Already there are a few school gardens in connection with continuation classes. The extra time spent in the garden appears to strengthen rather than weaken the proficiency of the class in examination subjects. It is evidently a case of economy of time and acquisition of power.

During the past season the class at Alliston, one of the most prosperous classes in the province, made a creditable beginning in school gardening. Mr. J. A. Speers, M.A., principal of the Continuation Class, briefly summarizes the work as follows:

"1. Area of garden $\frac{3}{4}$ acres; area of school grounds 4 acres.

2. Method of conducting work. (*a*) Two classes boys and girls working together. (*b*) Each class cared for two plots of potatoes, one of onions, and one of cabbage. (*c*) Time devoted to the work, about fifteen minutes daily. (*d*) The pupils met in July 15th to complete the work for the summer. (*e*) A room in the basement was used as a storehouse for implements and produce.

3. Seeds planted:—(*a*) Potatoes—4 plots of $\frac{1}{8}$ acre each, (*b*) Cabbages—60 heads. (*c*) Onions—2 plots of 1 square rod each.

4. Experiments. (*a*) Planting seed at varying depths. (*b*) Planting seed at different dates. (*c*) Use of Bordeaux mixture, and cabbage worm-mixtures. (*d*) Advantage of irrigation.

5. Proceeds: 38 bags of potatoes; 50 heads of cabbage; 1 bag of onions, the proceeds of which are to be used in improving the garden."

The School Garden presents at least one available means of giving a very practical and invigorating turn to a considerable part of the prescribed course in science. It is a means, too, whereby the teacher may become competent in the work while guiding his pupils. The chief equipment—the soil, the insects, the sun, the rain, the air, the seeds, and the birds—is already at hand.

In the case of rural and village schools the Department of Education has provided liberal encouragement, allowing an initial grant of $100, and an annual grant of $20.

Also where the teacher has taken a recognized preparatory course for garden work he will receive an annual legislative grant of $30.

As there are several Continuation Classes in the smaller towns, and as the pupils of the towns would also benefit greatly by garden work, the grants for school gardens might well be extended to the towns.

Signs of Growth.

The following comparison of statistics for the year 1906 and 1907 will indicate the general lines of growth for the past twelve months:

	1906.	1907.
Number of pupils enrolled	3,993	4,744
Pupils from the section	2,627	3,148
Pupils from other sections	1,366	1,596
How many other sections	569	653
Number in Form I	1,614	1,825
Number in Form II	1,143	1,360
Number in Form III	1,214	1,538
Number in Form IV	22	21
Candidates for Junior Teachers	396	472
Number that passed	193	202
Number obtaining honours	52	46
Candidates for Junior Matriculation	138	175
Number that passed	88	106
Number obtaining honours	8	7
Candidates for Senior Teachers	17	5
Number that passed	9	4
Value of Equipment:		
Maps, charts, globes	$ 2,492 00	$ 3,098 00
Scientific apparatus	11,884 00	16,369 00
Library	2,589 00	6,063 00
Drawing models	238 00	815 00
Total value of equipment	17,203 00	26,345 00
Number of grade A classes	91	107
Average salary Principals	$662 00	$719 00
Average salary Assistants	467 00	529 00
Number of teachers giving whole time	117	140

The Value of Literature.

In urging the reduction of much of the school work to a more practical basis it is recognized that it would be only a calamity were the school to contribute to the material success of life without promoting its spiritual enrichment. For this reason, the cultivation of literature, the reading habit, and artistic taste is being prosecuted as a special phase of Continuation work. The teachers are making good headway in the application of the library as an auxiliary in all branches of the work, particularly in literature and history. While the value of scientific apparatus has increased about fifty per cent., that of the libraries has increased by one hundred and forty per cent., and the equipment in art, still inadequate, has been nearly trebled. A fair beginning in brush work has recently been made in many schools, and it is now fully understood that subjects in the past neglected through adverse circumstances will at once occupy the prominent place that their educational importance demands. In the near future not only the scientific apparatus but the libraries will be brought up to the maximum standard for which grants are payable.

In addition to the works prescribed for special study in the literature class, each form is now taking up four supplementary works each year. The pupil writes a synopsis of each work, and this is preserved along with other exercises for future inspection. Thus in a course of three years the pupil reads a minimum of twelve extra works under supervision of the staff, over and above his general use of the school library.

Thus while through the laboratory the analytic, discursive, generalizing powers of the intellect are being trained on the material plane, it is at least being recognized that a further development is necessary on the human or spiritual plane, and that a proper study of literature develops capacity to judge within the sphere of moral action and strengthens the character in reverence, charity and truth. The laboratory and the library are complementary in the school.

Approved Schools.

Under the most favorable conditions as to accommodations, equipment, and ability of pupils and staff, the work of the Continuation Class is strenuous. The reduction of the July examination under the system of approved schools will certainly afford some relief through lessening a vexatious strain. But the prescribed work must be much more thoroughly done than hitherto since educational efficiency is the object of the change.

The average Continuation Class attempts a programme of work extending as far as the end of the Middle School course. The crux of the difficulty is not the course of the Middle School, but that of the Lower School. The latter has been crowded into two years with the result that several very important non-examination subjects have been neglected, even in some of those classes where there is a staff of two teachers, and indeed very generally in the one-teacher classes.

The statistics in reference to the ages of pupils show that they enter Forms I, II, and III, at the average ages of 14, 15, and 16 respectively. Unless a full period of three years is devoted to the course of the Lower School, instead of two years as hitherto, it is scarcely to be hoped that many Continuation Classes will win a place on the list of approved schools. Of course, the two-teacher classes, owing to division of work, will be in a more advantageous position to overtake the course thoroughly. But the problem is not so much one depending on the size of staff as on the extent of the course and the time given by the pupil. In the interests of thoroughness and the entire educational future of the pupil a period of four years should be spent on the work of the Lower and Middle Schools.

After spending two or three years in Forms I and II, taking up the course of the Lower School, the pupil will then pass into Form III, and upon completing the Middle School Course in that form, he will, if he wishes to become a teacher, take the July examination in literature, composition, history, algebra, geometry, physics, and chemistry. Upon passing this examination he will then have nearly three months to review the subjects of Form I and II on which, if he does not come from an approved school, he will be required to pass an examination on presenting himself for admission to the Normal School at the end of September. Thus a definite test of competency in the subjects of the Lower School is provided for those who will need it, under circumstances of time and place that may be expected to encourage substantial work where hitherto there has been most weakness and where thoroughness is of most vital consequence.

Two Teachers Needed.

While every Continuation Class will be eligible to strive for grading as an approved school, it has been already indicated that circumstances will be against the one-teacher class in this respect. But the opportunities of such classes to do work will not be curtailed on this account. The new conditions will be much more favourable to them than the old, the only discrimination being that pupils from non-approved schools who wish to enter Normal Schools will be required to pass an examination at opening of Normal School in September.

The rapid growth of attendance at the Continuation Classes points, however, to the early need for a staff of two teachers in nearly every school. During the fall term of 1907 the average roll per school represented 33 pupils with 87 per cent. of regularity in attendance.

With a staff of two teachers a better organization of work will be possible, with a greater resulting efficiency of working power. The addition of a second teacher is already becoming a vital matter to not a few schools. In many places a Continuation Class is maintained through the interest and efforts of a few progressive ratepayers who manage to carry a bare majority of the ratepayers with them. Notwithstanding the fact that the class is larger than it should be for the one teacher conducting it, to incur the increased expense necessitated by the appointment of a second teacher would almost inevitably lead in not a few cases to the abandonment of the class altogether. Thus some sections have already arrived at a point where they have to choose between such a probability as this or closing their class to non-residents.

In view of the fact that the 107 Continuation Classes are attended by pupils from 760 sections, this question is of much concern to the Department of Education. The present scheme of grants is affording great stimulus to School Boards to improve equipment and other features of importance to thorough work. But the scheme does not go quite far enough to afford ample encouragement to Boards to meet such conditions as those referred to above. As much assistance as possible should be given to enable every Continuation Class to ultimately engage the full time of two qualified teachers. The typical Continuation Class should have a staff of two teachers. Under such conditions it would have a fair opportunity to become an approved school; and this is only just, since the absence of such opportunity means that some pupils must pursue their work under less favourable conditions than others.

Extension of Secondary Education.

Liberal legislative support of Continuation Classes is justified on the ground that the rural population should have a means of secondary education in lieu of that available to the urban centres in the high schools.

The policy of liberally supporting such classes consistently includes the policy of extending them to all parts of the province. This involves the duty of placing before the School Boards and ratepayers of suitable sections the advantages of such classes and the conditions of their establishment and maintenance. There are many sections that could maintain prosperous classes, and that might be expected to open such classes were they made acquainted with the conditions. It seems that few of the local inspectors have time to devote to this important mission. A small number of inspectorates have high schools in reach of almost every primary school. In others the inspector has succeeded in having Continuation Classes placed in parts remote from the high schools, but in many inspectorates much work of this kind remains to be done.

The Relations of Continuation Classes and High Schools.

At present the clauses of the Public Schools Act dealing with the establishing of Continuation Classes protect the legitimate field of existing high schools by prescribing that such classes may not be established within high school districts. By inference the high schools should be expected to efficiently fulfil their mission of placing a suitable measure of secondary education within reach of all the pupils of their district. In some cities and

towns it is claimed by the elementary school boards that such suitable education is not provided at the high school. Consequently a demand is being made for Continuation Classes in connection with public and separate schools of some urban centres.

The friends of a few other high schools have used their influence to oppose the opening of Continuation Classes at points considerably beyond the boundaries of their own district, and there are instances on record where similar influences have sought to prevent County Councils from affording extra aid to classes already in existence that are struggling to educate children many of whom could not attend a high school.

Fortunately such conditions and attitudes are not general, but they are of sufficient importance to be worthy the attention of the Education Department.

If two or more high schools will reach more pupils than one larger and more excellent institution, and if two or more Continuation Classes will reach more pupils than one high school or one large Continuation Class, then from the standpoint of public administration the argument seems to be in favour of the more numerous classes or schools, assuming their efficiency, since money taken for educational purposes from all the people should equitably be used in providing, as nearly as practicable, equal educational opportunity for all the people.

CONTINUATION

Statistics for the year

	Inspectorate.	Name of School.		Teachers.
		School Section.	Post Office.	Names and Degrees of Teachers giving whole of time to Continuation Classes.
1	Algoma	Bruce Mines	Bruce Mines	W. J. Osborne
2		Thessalon	Thessalon	Jessie C. McKinnon
3		Blind River	Blind River	C. S. Carter
4	Brant	8 S. Dumfries	St. George	A. E. Green
5	Bruce, West	Lucknow	Lucknow	John G. Gordon
6		Paisley	Paisley	Geo. B. Bell Edith C. Coad, B.A.
7		Southampton	Southampton	Harry S. White
8		Teeswater	Teeswater	Stanley Wightman
9		10 Huron	Ripley	H. R. Henderson
10	Carleton	8 Fitzroy	Fitzroy Harbor	Mabel B. O'Brien
11		9 Gloucester	Cummings Bridge	Edith M. Adams
12		5 "	Bowesville	Edith A. Hughes
13		5 Goulburn	Munster	Bertha M. Gurney
14		7 "	Ashton	H. May Peregrine
15		Richmond	Richmond	Minnie B. Mackay, B.A.
16		U. 18 Osgoode	Manotick	Geo. S. Easton
17		15 Osgoode	Kenmore	Ida Norton
18		10 Nepean	Jock Vale	Hattie M. Bartley
19		3 Marlborough	Malakoff	Miss S. A. Sturgeon
20		3 Huntley	Carp	Sarah A. Hunt, B.A.
21		6 N. Gower	North Gower	Margaret E. Craig
22		3 "	Kars	Charlotte E. Campbell
23		5 Fitzroy	Kinburn	Katharine Caesar
24		12 Goulburn	Stittsville	Laura J. Berney, B.A.
25		11 Osgoode	Metcalfe	Annabel Cowan M. H. Rutherford
26		Hintonburg	Hintonburg	H. W. Brownlee, B.A.
27		Ottawa, East	Ottawa, East	Dolly Potter
28	Dufferin	11 Grand Valley	Grand Valley	A. M. Warner
29		Shelburne	Shelburne	T. E. Langford, M.A Isabel K. Smith, B.A.
30	Dundas	Chesterville	Chesterville	Elsie M. Wise
31		Winchester	Winchester	Laura A. Whitney
32		12 Winchester	Morewood	H. Loucks
33	Durham	Millbrook	Millbrook	D. Hampton
34	Elgin	6 Aldborough	West Lorne	E. Myrtle Hammond
35		5 "	Rodney	W. H. Kirkpatrick, B.A.
36		Springfield	Springfield	E. O. Awde
37	Essex, South	Amherstburg	Amherstburg	G. Summers Retta M. Hicks
38		4 Tilbury, West	Comber	Cora Miller, M.A Mary A. Stone
39		9 Colchester, South	Harrow	Stella Mott
40	Glengarry	Maxville	Maxville	C. H. Cecil Moyer
41	Grey, South	Durham	Durham	Thos. Allen Donalda McKeracher, B.A. Gertrude Hodge, B.A.
42		Hanover	Hanover	Jas. A. Magee
43	Haldimand	10 Walpole	Jarvis	Mabel Buchanan, B.A.
44	Haliburton, etc.	Huntsville	Huntsville	A. C. Bernath
45	Halton	Acton	Acton	Wm. H. Stewart Miss M. Norton
46		Burlington	Burlington	C. S. Wynne Garnette Freeman
47		Milton	Milton	W. F. Inman Miss M. A. Campbell

CLASSES, GRADE A.

ending 31st December, 1907.

	How many giving whole time?	Professional Certificate.	Annual rate of Salary.	Attendance and Classification of Pupils.																
				Total number of Pupils enrolled.	Number of Boys.	Number of Girls.	Average Age of Pupils, Sept. 1st, 1907. Form I.	Average Age of Pupils, Sept. 1st, 1907. Form II.	Average Age of Pupils, Sept. 1st, 1907. Form III.	Average Age of Pupils, Sept. 1st, 1907. Form IV.	Number who passed Entrance Exam.	Number enrolled 1st half year.	Number of Days School was open 1st half year.	Aggregate Attendance 1st half year	Number enrolled 2nd half year.	Number of Days School was open 2nd half year.	Aggregate Attendance 2nd half year.	Number of Pupils from Section.	Number from other Sections.	How many other Sections?
			$																	
1	1	I	800	35	14	21	14.7	14.5	15.8	..	35	23	115	2,206	23	73	1,557	33	2	2
2	1	I	700	25	2	23	13	15	....	..	24	17	116	1,520	14	78	836	19	6	2
3	1	I Int.	1,000	12	7	5	15.	17.2	15.	..	12	.....	....	.....	12	76	688	12	.....	.....
4	1	I	600	40	24	16	14.6	15.4	16.9	..	37	28	119	2,581	26	76	1,626	20	20	7
5	1	I	850	87	37	50	12.	14.	17.	..	87	53	114	5,178	62	74	3,739	54	33	....
6	1	I	800	64	15	49	14.5	15.5	16.5	..	62	43	118	4,420	45	77	3,112	46	18	12
	1	I Int.	650																	
7	1	I	900	27	8	19	13.	15.	16.	..	27	10	117	855	22	74	1,372	27	.....	....
8	1	I	800	47	27	20	14.	14.8	15.3	..	44	31	118	3,084	39	78	2,662	32	15	8
9	1	I	650	22	6	16	13.6	14.3	15.2	..	22	16	120	1,464	17	85	1,209	20	2	2
10	1	I	550	28	8	20	14.5	16.	17.	..	28	21	105	1,592	18	73	1,134	19	9	4
11	1	I	500	11	4	7	14.	14.8	16.	..	10	9	118	930	9	84	559	7	4	3
12	1	I Int.	500	13	4	9	13.8	17.5	....	..	11	9	114	901	9	81	612	11	2	2
13	1	I Int.	425	18	10	8	13.7	14.	17.7	..	17	15	120	1,363	12	76	718	7	11	3
14	1	I	600	20	10	10	14.6	14.5	16.	..	20	16	112	1,373	20	79	1,062	7	13	4
15	1	I	500	34	14	20	13.5	13.6	17.	..	34	28	108	2,232	26	76	1,634	26	8	4
16	1	I Int.	600	28	13	15	13.6	14.8	14.9	..	28	16	115	1,652	27	76	1,731	27	1	1
17	1	I	500	30	12	18	14.	15.3	16.5	..	28	22	126	2,003	23	88	1,320	16	14	4
18	1	II	600	28	8	20	14.5	16.8	17.5	..	27	17	115	1,797	25	76	1,800	16	12	5
19	1	I	500	16	10	6	16.2	13 6	12.6	..	13	13	117	949	16	77	778	13	3	2
20	1	II	600	49	15	34	13.	14.	16.	..	49	31	114	2,791	38	86	2,620	27	22	9
21	1	I	550	37	18	19	14.	14.	17.	..	36	27	118	2,626	27	77	1,784	17	20	5
22	1	I Int.	500	22	11	11	13.7	15.	15.1	..	22	14	109	810	14	78	916	14	8	5
23	1	I Int.	500	23	13	10	13.4	14.8	14.5	..	23	18	112	1,450	17	85	1,145	16	7	3
24	1	I Int.	600	31	10	21	13.9	14.4	14.7	..	28	19	118	1,223	22	78	1,405	7	24	9
25	1	I Int.	500	42	18	24	14.	15.2	18.4	..	42	33	120	2,709	19	86	1,120	20	22	15
	1	I Int.	450																	
26	1	III	1,000	49	20	29	13.5	14.2	16.	..	45	24	130	3,631	36	67	3,025	33	16	4
27	1	I Int.	500	33	14	19	13.2	14.8	15.1	..	32	21	116	1,905	12	77	1,424	16	17	3
28	1	I	750	36	12	24	13.	14.	16.	..	24	24	118	2,146	12	76	1,755	28	8	7
29	1	I	900	60	19	41	15.3	15.3	16.4	..	59	42	120	3,839	41	77	2,770	36	24	13
	1	I Int.	600																	
30	1	I	600	35	14	21	13.	15.	16.	..	35	26	112	1,661	30	75	1,409	31	4	2
31	1	I	700	54	19	35	13.5	15.7	16.3	..	54	36	120	4,413	40	75	2,387	43	11	7
32	1	I	900	54	25	29	14.6	15.4	16.7	..	54	36	120	3,849	37	86	2,681	22	32	18
33	1	II	650	40	16	24	13.5	13.9	16.	..	40	26	115	2,475	29	77	1,810	32	8	6
34	1	I	570	40	19	21	12.	14	....	..	40	28	118	2,605	25	75	1,745	39	1	1
35	1	Temp	800	26	6	20	12.	13.	15.	..	26	18	110	1,450	26	86	1,828	23	3	1
36	1	I Int.	650	26	13	13	13.2	15.2	16.4	..	25	17	111	1,663	18	74	1,150	24	2	2
37	1	I	850	46	21	25	14.	15.	16.	..	44	23	120	2,163	32	75	1,974	39	7	4
	1	I Int.	525																	
38	1	I Int.	600	30	9	21	15.	15.	16.	..	30	20	120	1,667	21	74	1,299	25	5	3
	1	I Int.	500																	
39	1	I	550	28	14	14	15.2	14.9	16.2	..	27	14	116	1,512	27	75	1,599	19	9	5
40	1	I	800	48	21	27	14.6	14.9	15.3	..	46	35	113	3,270	34	75	2,012	28	20	11
41	1	I	800	99	33	66	14.2	14.6	15.7	..	99	67	116	6,854	63	74	4,290	49	50	26
	1	I Int.	600																	
	1	I Int.	600																	
42	1	I	900	44	14	30	13.5	14.7	16.6	..	44	38	114	3,778	30	76	1,953	33	11	8
43	1	I Int.	650	36	18	18	13.	14.5	....	..	36	25	119	2,546	26	75	1,661	21	15	7
44	1	I	950	38	12	26	14.2	15.	....	..	35	24	114	2,380	26	78	1,881	35	3	1
45	1	I	750	56	22	34	13.5	15.	16.	..	56	32	115	2,888	46	77	3,118	42	14	4
	1	I	500																	
46	1	I Int.	700	50	23	27	13.4	14.	16.	..	50	36	118	3,065	42	77	2,891	40	10	3
	1	I Int.	400																	
47	1	I	800	74	30	44	13.2	14.6	17.	15	74	56	118	5,867	52	77	3,378	57	17	8
	1	I Int.	550																	

CONTINUATION CLASSES,

Statistics for the year ending 31st

	Number in Form I (Lower School).	Number in Form II (Lower School).	Number in Form III (Middle School).	Number in Form IV (Upper School).	Number of Pupils in the Various Subjects.													
					Composition.	Literature.	History.	Algebra.	Geometry.	Physics.	Chemistry.	Latin.	Reading.	Writing.	Spelling.	Bookkeeping, etc.	Art.	Biology.
1	13	4	18	.....	35	35	35	35	35	24	18	35	26	26	.....	13	26	13
2	6	13	6	.....	25	25	25	25	25	25	25	25	25	25	25	25	25	25
3	7	4	1	.....	12	12	12	12	12	12	5	12	12	7	7	7	11	11
4	15	13	12	.....	40	40	40	40	40	40	25	19	40	15	.....	15	15	15
5	24	13	50	.....	87	87	87	87	87	87	45	70	67	67	.....	67	67	67
6	42	9	13	.....	64	64	64	64	64	64	64	53	64	64	64	50	50	50
7	13	9	5	.....	27	27	27	27	27	27	13	18	27	13	13	17	17	..
8	20	12	15	.....	47	46	46	46	46	46	46	45	32	32	32	20	32	32
9	6	6	10	.....	22	22	22	22	22	22	22	22	22	22	22	16	22	20
10	9	6	13	.....	28	28	28	28	28	28	28	10	17	17	.....	12	17	17
11	3	6	2	.....	11	11	11	11	11	11	11	9	11	2	11	10	11	10
12	7	6	.....	.....	13	13	13	13	13	13	13	13	13	13	.....	13	13	13
13	5	4	9	.....	18	18	18	18	18	18	18	18	18	.....	.....	9	9	9
14	6	9	5	.....	20	20	20	20	20	20	20	15	20	.. ...	20	15	15	15
15	10	11	13	.....	34	34	34	34	27	27	17	34	34	.....	.....	14	14	34
16	12	8	8	.....	28	27	28	27	24	27	7	18	20	.....	.....	12	20	20
17	6	12	12	.....	30	30	30	30	24	30	24	30	30	18	.....	6	6	6
18	17	6	5	.....	28	28	28	28	28	28	28	28	28	28	28	28	28	28
19	3	13	... ..	.....	16	16	16	16	16	16	16	16	16	3	.....	3	3	....
20	25	12	12	.....	49	49	49	49	49	49	12	10	49	37	.....	36	37	49
21	14	7	16	.....	37	37	37	37	37	37	21	35	37	31	37	29	31	37
22	13	4	5	.....	22	22	22	22	22	22	14	22	21	16	.....	16	19	....
23	11	8	4	.....	23	23	23	23	23	23	4	23	19	19	.....	19	19	19
24	14	11	6	.....	31	31	31	31	31	31	17	31	31	14	14	14	14	31
25	10	6	26	.....	42	42	42	42	42	42	42	17	17	17	.....	17	17	....
26	32	12	5	.....	49	49	49	49	49	49	17	21	49	49	.....	32	49	49
27	16	14	3	.....	33	33	25	33	33	23	22	28	33	.....	.....	19	20	26
28	21	7	8	.....	36	36	36	36	36	36	36	36	36	28	28	28	28	28
29	20	20	20	.....	60	60	60	60	56	58	59	34	47	47	47	47	45	36
30	6	8	21	.....	35	35	35	35	35	35	35	10	35	35	35	6	14	14
31	21	14	19	.....	54	54	54	54	54	54	17	37	54	54	54	42	42	42
32	14	11	29	.....	54	54	54	54	54	54	54	.....	54	22	54	22	30	50
33	15	14	11	.....	40	40	39	39	37	40	7	19	39	39	39	23	39	29
34	12	28	.....	.....	40	40	40	40	40	40	28	37	40	40	40	40	40	28
35	13	7	6	.....	26	26	26	26	26	26	26	.....	26	26	26	26	20	....
36	11	10	5	.....	26	26	26	26	26	26	26	26	26	26	26	24	24	24
37	28	6	12	.....	46	46	45	43	42	42	8	36	16	46	46	39	36	36
38	12	7	11	.....	30	30	30	30	30	30	30	21	21	21	21	21	21	21
39	12	12	4	.....	28	28	28	28	28	28	15	28	28	24	24	24	24	15
40	16	21	11	.....	48	48	48	48	48	48	48	48	46	46	40	46	46	46
41	30	21	48	.....	99	99	99	99	99	99	99	.....	67	67	99	50	50	67
42	10	14	20	.....	44	44	44	44	44	34	34	37	44	44	44	37	44	24
43	11	25	.....	.....	36	36	36	36	36	36	36	32	36	36	.... .	36	36	....
44	19	19	... .	.....	38	38	38	38	38	38	24	.....	38	38	38	38	38	....
45	26	16	11	.. ..	54	54	55	54	54	54	54	43	26	26	.....	27	26	26
46	13	15	22	.....	50	50	50	36	36	36	36	42	50	50	50	36	36	28
47	18	16	39	1	74	74	74	74	74	74	39	35	74	74	74	34	34	....

GRADE A.—*Continued.*

December, 1907.—*Continued.*

							Examination Results.											
	Geography.	Grammar.	French.	German.	Agriculture.	Household Science.	Candidates for District Certificates.	Number that passed.	Candidates for Junior Teachers.	Number that passed.	Number that obtained Honours.	Candidates for Senior Teachers.	Number that passed.	Number that obtained Honours.	Candidates for Junior Matriculation.	Number that passed.	Number that obtained Honours.
1	35	35	.....	.....	.....	.....	.....	*3	6	3	2	.....	.....	.....	1	1	.....
2	25	25	20	.....	.....	.....	6	1	.....	.....	.....	.....	.....	.....	3	3	.....
3	12	12	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
4	36	40	11	.....	.....	.....	.....	.....	5	2	.....	.....	.....	.....	3	3	.....
5	87	87	40	.....	.....	.....	.....	.....	17	3	.....	.....	.....	.....	.....	.....	.....
6	64	64	25	.....	.....	.....	.....	.....	10	3	.....	.....	.....	.....	3	2	.....
7	27	27	17	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
8	46	46	27	.....	.....	.....	.....	.....	4	2	1	.....	.....	.....	2	1	1
9	22	22	22	.....	.....	.....	.....	.....	2	1	1	.....	.....	.....	.....	.....	.....
10	28	28	16	.....	.....	.....	.....	.....	3	1	.....	.....	.....	.....	.....	.....	.....
11	11	11	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....
12	13	13	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
13	15	18	3	.....	.....	.....	.....	.....	5	.....	.....	.....	.....	.....	3	.....	.....
14	20	20	15	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....
15	34	34	24	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
16	20	27	19	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
17	30	30	3	.....	.....	.....	.....	.....	5	.....	.....	.....	.....	.....	.....	.....	.....
18	28	28	28	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
19	16	16	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
20	49	49	35	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	.....
21	37	37	18	.....	.....	.....	.....	.....	7	5	1	.....	.....	.....	3	1	.....
22	22	22	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
23	19	23	23	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
24	31	31	17	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....
25	42	42	18	.....	.....	.....	.....	.....	7	2	.....	.....	.....	.....	.....	.....	.....
26	49	49	43	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
27	25	33	29	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
28	36	36	.....	.....	.....	.....	.....	.....	3	2	1	.....	.....	.....	.....	.....	.....
29	52	60	32	.....	.....	.....	.....	.....	7	1	1	.....	.....	.....	3	2	.....
30	35	35	10	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....
31	54	54	37	.....	.....	.....	.....	.....	2	1	.....	.....	.....	.....	1	1	.....
32	54	54	.....	.....	.....	.....	.....	.....	16	10	.....	.....	.....	.....	1	.....	.....
33	36	39	37	.....	.....	.....	.....	.....	5	1	1	.....	.....	.....	4	3	.....
34	40	40	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
35	26	26	.....	.....	11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
36	26	26	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
37	42	45	34	1	.....	.....	.....	.....	1	1	1	.....	.....	.....	2	2	.....
38	30	30	20	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	.....
39	28	28	15	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
40	46	48	45	.....	.....	.....	4	3	4	1	.....	.....	.....	.....	1	.....	.....
41	99	99	.....	.....	.....	.....	.....	.....	24	13	5	.....	.....	.....	9	5	.....
42	44	44	.....	27	.....	.....	.....	.....	8	1	.....	.....	.....	.....	5	4	.....
43	36	36	28	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
44	38	38	.....	.....	.....	.....	8	8	.....	.....	.....	.....	.....	.....	.....	.....	.....
45	42	54	39	.....	.....	.....	.....	.....	5	2	.....	.....	.....	.....	3	2	.....
46	50	50	40	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
47	74	74	29	.....	.....	.....	.....	.....	6	3	.....	.....	.....	.....	3	2	.....

* Of candidates for Junior Teachers these got District Certificates.

CONTINUATION CLASSES,

Statistics for the year ending 31st

	Destination of Pupils.						Occupation of Parents.					Value of Equipment.					
	Agriculture, etc.	Mercantile Life.	Teaching.	Other Professions.	Mechanical Occupations.	Other Pursuits.	Agriculture, etc.	Mercantile Life.	Professions.	Mechanical Occupations.	Other Pursuits.	Maps, Charts, Globes, etc.	Scientific Apparatus.	Library.	Drawing Models, etc.	Total Value of Equipment.	Value of Additions, 1907.
												$	$	$	$	$	$
1	....	1	7	.....	1	.....	3	4	.....	12	16	.....	200	100	.....	300	80
2	....	2	4	1	2	7	6	13	.....	3	3	25	150	150	25	350	222
3	....	.....	.....	.....	.....	.....	.....	7	1	1	3	25	172	178	25	400	400
4	3	.....	.....	1	1	9	26	2	2	5	5	.....	118	80	.....	198	.....
5	....	.....	.....	.....	.....	.....	42	6	10	14	15	.....	200	20	10	230	150
6	1	.....	3	1	1	6	22	8	8	11	15	40	330	.....	30	400	122
7	....	2	.....	.....	.....	.....	.....	1	.....	9	17	20	138	8	90	256	130
8	....	1	1	1	2	7	15	11	3	9	9	44	200	150	15	409	160
9	1	1	1	.....	1	1	7	6	6	2	1	45	100	63	20	228	135
10	....	1	2	1	.....	6	15	3	.....	5	5	26	113	4	6	149	29
11	1	.....	.....	.....	.....	1	9	.....	.....	1	1	.....	95	.....	.....	95	25
12	2	1	.....	.....	1	.....	12	.....	.....	.....	1	10	60	62	.....	132	100
13	3	.....	.....	.....	.....	3	17	.....	.....	1	.....	5	59	20	25	109	32
14	1	.....	.....	.....	.....	3	17	.....	1	1	1	73	.....	22	.....	95	45
15	2	2	5	.....	.....	1	18	1	1	2	12	25	59	19	.....	103	54
16	....	.....	.....	.....	.....	3	19	2	2	1	4	6	32	8	3	49	19
17	....	1	1	.....	2	3	17	1	2	9	1	.....	50	.....	.....	50	25
18	4	.....	.....	.....	.....	.....	28	.....	.....	.....	.....	.....	101	16	.....	117	93
19	3	.....	.....	.....	.....	.....	14	1	.....	.....	1	15	132	6	.....	153	80
20	1	1	3	.....	.....	6	31	6	4	4	4	30	150	.....	4	184	100
21	4	.....	3	.....	.....	3	24	10	.....	2	1	.....	112	10	.....	122	69
22	2	2	.....	.....	.....	5	10	3	.....	4	5	.....	95	38	.....	133	12
23	4	.....	.....	.....	.....	2	20	1	.....	1	1	.....	54	18	.....	72	36
24	1	2	.....	.....	.....	6	24	2	1	2	2	.....	76	.....	.....	76	65
25	....	2	1	.....	.....	11	23	14	1	.....	4	.....	72	187	.....	259	32
26	3	4	.....	.....	2	.....	12	6	1	18	12	32	100	65	2	199	.....
27	....	.....	.....	.....	.....	12	4	9	3	2	15	.....	100	.....	.....	100	.....
28	2	4	3	.....	1	1	16	8	3	4	5	22	204	76	4	306	31
29	2	5	4	.....	1	7	20	19	5	5	11	252	540	153	10	955	365
30	1	1	.....	.....	.....	.....	5	9	1	7	13	40	132	30	.....	202	.....
31	....	3	2	.....	.....	10	19	10	3	4	18	25	107	58	.....	190	80
32	1	1	8	3	.....	4	33	9	1	10	1	18	299	45	.....	362	30
33	2	3	1	.....	.....	3	11	11	.....	3	15	27	100	5	20	152	57
34	5	4	.....	6	.....	1	14	9	6	9	2	50	150	200	25	425	20
35	....	2	.....	.....	.....	2	8	6	.....	.....	12	5	110	25	.....	140	100
36	2	3	.....	.....	.....	4	6	9	6	4	1	10	70	40	.....	120	25
37	2	2	3	1	1	5	7	11	5	3	20	30	190	15	.....	235	90
38	1	.....	2	.....	1	5	13	6	1	2	8	25	250	20	.....	295	50
39	....	1	.....	.....	.....	.....	16	6	2	1	3	.....	72	.....	.....	72	11
40	1	4	4	1	1	9	21	13	2	7	5	5	230	2	.....	237	130
41	....	3	16	4	1	11	45	14	12	16	12	.....	225	100	10	335	37
42	....	3	1	.....	.....	13	12	10	10	11	1	22	239	52	1	314	112
43	2	.....	.....	.....	.....	7	19	7	2	5	3	.....	120	25	5	150	125
44	....	2	2	.....	.....	.....	2	10	4	10	12	75	100	60	3	238	.....
45	2	.....	2	.....	.....	.....	12	4	.....	6	34	.....	84	34	14	132	76
46	8	1	1	.....	.....	6	16	10	4	10	10	.....	182	.....	10	192	20
47	1	5	1	1	.....	.....	19	5	10	7	33	60	200	75	15	350	200

GRADE A.— *Continued.*

December, 1907.—*Continued.*

Fees.			Teachers for 1908.	
Monthly Fee of Pupils of Section.	Monthly Fee of other Pupils.	Basis of Special County Grant, if any.	Names and Degrees.	Salary.
$ c.	$ c.			$
1	.50		W. J. Osborne	800
2	.50		J. C. McKinnon	700
3			C. S. Carter	1,000
4	.25		A. E. Green	600
5 .50	1.00	$50 extra per teacher	John G. Gordon	850
6 I. & II., 50c. III., $1.25.	I. & II., $1.00 III., $1.25	$50 " " "	Geo. B. Bell	800
			Edith L. Coad	650
7 .80	.80	$50 " " "	Harry S. White	900
8 I., 50c.; II., 75c.; III., $1.00	I., 50c.; II., 75c.; III., $1.	$50 " " "	Stanley Wightman	800
9		$50 " " "	H. R. Henderson	650
10		$110 " " "	Mabel B. O'Brien	500
11		$110 " " "	Edith M. Adams	500
12		$110 " " "	Edith A. Hughes	500
13		$110 " " "	Bertha M. Gurney	425
14		$110 " " "	H. May Peregrine	600
15 .50	1.00	$110 " " "	Minnie B. Mackay, B.A.	500
16		$110 " " "	Geo. S. Easton	600
17 1.00	1.00	$110 " " "	Kathrine Jackson, B. A.	650
18		$110 " " "	Hattie M. Bartley	700
19		$110 " " "	Miss S. A. Sturgeon	500
20 .50	1.00	$110 " " "	Ida Norton	600
21		$110 " " "	Margaret E. Craig	600
22		$110 " " "	Charlotte E. Campbell	500
23		$110 " " "		
24 .50	.50	$110 " " "	Laura J. Berney, B. A.	600
25	1.00	$110 " " "	Annabel Cowan	500
			M. H. Rutherford	450
26		$110 " " "	H. W. Brownlee, B. A.	1,000
27 .50	.50	$110 " " "	Dolly Potter	500
28		$5 per pupil.	E. A. Lloyd	750
29 M. S. only, $1.	1.00	$5 " "	T. E. Langford, M. A.	900
			Isabel K. Smith	600
30 1.00	2.00	50% added.	Geo. H. Steer	1,100
31	1.00	" "	A. J. Keenan	1,000
32 1.10	1.10	" "	H. Loucks	1,000
33		$50 per year.	D. Hampton	650
34		25% added.	F. Tanton	800
35		" "	W. H. Kirkpatrick, B. A.	800
36	1.00	" "	E. O. Awde	650
37 1.00	1.00	$100 extra per teacher	G. Summers	
			Retta M. Hicks	
38 .70	.70	$100 " " "	Cora Miller, M. A.	675
			Mary A. Stone	500
39	1.00	$100 " " "	Stella Mott	550
40 .50	1.00	50% added.	C. H. Cecil Moyer	800
41 *I., 50c.; II., 75c.; III., $1	1.00		Thos Allan	800
			Donalda McKeracher, B. A.	600
			Gertrude Hodge, B. A.	600
42 1.00	1.00		Jas. A. Magee	900
43			Mabel Buchanan, B. A.	650
44	.75		A. C. Bernath	950
45 .50	.75		Wm. H. Stewart	750
			Miss Myrtle Hammond	500
46 1.00	1.50		C. S. Wynne	800
			Garnette Freeman	450
47 †	‡		W. F. Inman	800
			Miss M. A Campbell	650

*No fees are charged first year if languages are not taken.
†No fees are charged first year if languages are not taken; if taken, $7 per year.
‡$10 per year if languages are taken; otherwise $6.

CONTINUATION CLASSES,

Statistics for the year ending 31st

	Inspectorate.	Name of School.		Teachers.
		School Section.	Post Office.	Names and Degrees of Teachers giving whole of time to Continuation Classes.
48	Hastings, South	Tweed	Tweed	V. K. Greer
49	Huron East	Brussels	Brussels	J. H. Cameron Helen D. Ford
50		Blyth	Blyth	Jos. Stalker
51	Huron, West	Exeter	Exeter	L. C. Fleming Stella L. Gregory Agnes M. Johnston
52		5 Stephen	Crediton	C. K. Bluett
53	Kent, East	Blenheim	Blenheim	A. A. Merritt Bessie McCamus
54		Bothwell	Bothwell	H. H. Kelly, B. A. Miss E. Livens
55		Dresden	Dresden	G. A. Miller Jean McConnell
56		Thamesville	Thamesville	J. G. Cameron E. Beckstedt
57		6 Orford	Highgate	E. E. Hoover
58	Kent, West	Tilbury	Tilbury	Agnes R. Alexander
59		Wallaceburg	Wallaceburg	E. U. Dickenson, B. A H. Tremeer
60	Lambton, East	Alvinston	Alvinston	F. Tanton Josie E. Switzer
61		Oil Springs	Oil Springs	Thos. R. Ferguson, M. A. Mary E. Lynch
62	Lanark	Lanark	Lanark	R. Beatty
63		4 Pakenham	Pakenham	Mina A. Ellis, M. A.
64	Leeds and Grenville (1)	Westport	Westport	E. O. Walker
65	Leeds and Grenville (3)	Merrickville	Merrickville	Bertha Dell
66		15 Edwardsburg	Spencerville	Fred P. Smith
67	Lennox and Addington	Bath	Bath	E. J. Keenan
68	Manitoulin	Little Current	Little Current	J. Young
69		Gore Bay	Gore Bay	Jas. Moriarity M. E. Ludlow
70		2 Assiginack	Manitowaning	Myrtle Madge
71	Nipissing	New Liskeard	New Liskeard	David T. Wright
72		Sudbury	Sudbury	Geo. H. Steer
73	Northumberland	2 Percy	Warkworth	Thorhilda DeMille
74	Ontario, North	Cannington	Cannington	J. M. Wilson
75	Oxford	Norwich	Norwich	Henry Wing Miss D. E. Taylor
76		U. 21, Blenheim	Princeton	A. C. Dougherty
77		U. 13, E. Zorra	Tavistock	C. W. Stanley
78	Parry Sound	Burk's Falls	Burk's Falls	A. M. Woodley
79		Parry Sound	Parry Sound	J. L. Moore Alex. Burke
80	Peel	Bolton	Bolton	C. J. Ewers
81	Peterborough	4 Ennismore	Ennismore	John A. O'Donohue
82		Havelock	Havelock	Percy S. Banes
83	Renfrew	*Cobden	Cobden	O. McCullough, B. A.
84		Eganville	Eganville	D. R. Harrison
85	Simcoe, North	Creemore	Creemore	D. Currie
86		5, Flos	Elmvale	W. A. Tydell
87	Simcoe, Southwest	Alliston	Alliston	J. A. Speers, M. A. Winnifred Bell
88		Beeton	Beeton	W. T. Baker C. M. R. Ballachey

* No report received, statistics estimated in part.

GRADE A.—*Continued.*

December, 1907.—*Continued.*

	How many giving whole time?	Professional Certificate.	Annual rate of Salary.	Attendance and Classification of Pupils.																
				Total number of Pupils enrolled.	Number of Boys.	Number of Girls.	Average Age of Pupils, Sept. 1st, 1907, Form I.	Average Age of Pupils, Sept. 1st, 1907, Form II.	Average Age of Pupils, Sept. 1st, 1907, Form III.	Average Age of Pupils, Sept. 1st, 1907, Form IV.	Number who passed Entrance Exam.	Number enrolled 1st half year.	Number of Days School was open 1st half year.	Aggregate Attendance 1st half year.	Number enrolled 2nd half year.	Number of Days School was open 2nd half year.	Aggregate Attendance 2nd half year.	Number of Pupils from Section.	Number from other Sections.	How many other Sections?
48	1	I	650	49	24	25	14.1	15.3	16.2	....	49	30	117	2,681	41	77	2,860	33	16	7
49	1	I Int.	1,000	81	45	36	14.2	15.1	15.1	....	80	61	117	7,216	58	76	4,087	40	41	8
	1	I Int.	500																	
50	1	II	750	35	15	20	14.6	15.8	17.9	....	35	21	118	2,023	25	76	1,507	23	12	12
51	1	I	1,020	135	73	62	14.4	15.	16.4	....	135	111	114	11,065	95	75	6,565	62	73	14
	1	I	600																	
	1	I	600																	
52	1	II	575	25	16	9	13.7	15.8	16.1	....	22	18	104	1,717	22	77	1,252	15	10	7
53	1	I	1,000	78	33	45	14.	15.	15.	....	77	56	113	4,979	59	75	3,651	53	25	8
	1	I	455																	
54	1	I	1,000	77	33	44	13.5	14.3	16.	15.2	77	58	119	5,796	52	78	3,596	39	38	9
	1	I	400																	
55	1	I	900	100	30	70	13.9	15.2	15.5	16.	100	61	120	6,978	83	78	5,833	64	36	10
	1	I	500																	
56	1	II	950	65	26	39	13.7	15.3	16.5	17.2	64	40	115	4,127	53	75	3,737	39	26	15
	1	I	500																	
57	1	I	700	39	18	21	14.	14.	16.	....	39	28	120	2,684	25	77	1,698	24	15	7
58	1	I	625	29	9	20	14.	14.	16.	....	29	16	120	1,495	22	77	1,238	27	2	1
59	1	I	1,100	74	28	46	14.	16.	17.	....	74	49	120	4,864	57	77	3,852	58	16	14
	1	I	600																	
60	1	I	850	54	28	26	13.7	14.4	15.6	16.	51	32	120	3,139	48	98	3,133	30	24	10
	1	I	600																	
61	1	I	800	46	15	31	14.7	15.5	15.4	15.	41	33	115	3,246	32	77	2,259	31	15	8
	1	I	400																	
62	1	II	600	70	26	44	14.	15.	16.	....	70	44	116	4,287	54	76	4,728	36	34	18
63	1	II	800	54	24	30	13.5	15.	16.	....	52	29	120	2,664	43	88	3,113	32	22	6
64	1	I	700	36	14	22	14.4	15.	15.5	....	36	20	115	1,887	30	78	1,353	32	4	2
65	1	I Int.	650	35	20	15	13.9	15.2	16.4	....	35	24	117	2,563	35	74	1,387	30	5	3
66	1	I	650	41	18	23	13.6	14.2	15.8	....	41	31	114	3,067	31	85	2,040	20	21	7
67	1	I	675	37	13	24	13.9	15.4	16.2	....	37	22	120	2,193	32	75	1,972	18	19	9
68	1	II	750	10	6	4	13.5	....	15.	...	9	.....	....	.....	10	79	744	10	.....	....
69	1	I Int.	800	63	15	48	15.	16.	18.	....	63	37	112	2,923	49	77	2,859	48	15	7
	1	I Int.	700																	
70	1	I	700	24	6	18	15.	16.	18.	....	24	14	107	824	19	73	857	21	3	2
71	1	I	1,000	24	11	13	15.	15.	16.	....	16	14	113	993	18	75	975	23	1	1
72	1	I	1,000	39	11	28	14.	14.5	15.	....	39	15	115	1,209	35	88	2,380	34	5	1
73	1	I Int.	550	69	26	43	14.1	15.7	17.3	....	66	38	117	3,494	46	75	3,168	31	38	11
74	1	II	600	25	13	12	13.5	14.5	....	....	24	9	120	729	21	71	1,340	19	6	4
75	1	I	675	59	22	37	14.	15.	17.	....	56	43	120	3,658	41	74	2,852	38	21	10
	1	I	500																	
76	1	I	700	33	11	22	14.5	14.	17.5	....	33	20	117	1,646	22	77	1,546	29	4	3
77	1	Temp	800	41	19	22	14.	15.	16.	....	40	29	116	2,883	31	70	1,825	30	11	5
78	1	I	800	23	5	18	12.1	15.4	....	....	23	14	103	1,164	17	78	1,022	20	3	3
79	1	I	1,000	69	19	50	15.	15.	16.	....	67	39	116	3,474	59	78	2,595	62	7	7
	1	I	900																	
80	1	II	700	39	22	17	13.5	14.5	16.	....	38	39	116	2,310	25	74	1,482	25	14	8
81	1	I	650	39	17	22	14.	16.	17.	....	37	23	115	2,232	36	73	2,316	14	25	7
82	1	I	750	26	17	9	14	15.3	....	....	22	11	120	859	26	78	1,633	23	3	3
83	1	II	650	27	13	14	14.	15.	16.	....	27	.....	...	.....	27	75	1,600	13	14	6
84	1	II	650	36	16	20	14.	15.	17.	....	35	28	118	2,724	26	77	1,639	27	9	7
85	1	I	725	35	13	22	13.	15.	....	....	34	28	116	2,606	23	71	1,548	30	5	2
86	1	I Int.	650	48	14	34	13.5	15.5	....	.. .	47	32	115	2,475	28	85	1,712	30	18	7
87	1	I	1,000	145	73	72	14.2	15 6	17.	18.4	143	80	121	7,690	65	78	7,696	83	62	12
	1	I	525																	
88	1	I	850	70	32	38	13.5	14.7	16.8	....	70	48	121	4,690	47	77	3,132	38	32	9
	1	I	525																	

CONTINUATION CLASSES,

Statistics for the year ending 31st

Number of Pupils in the Various Subjects.

	Number in Form I (Lower School).	Number in Form II (Lower School)	Number in Form III (Middle School).	Number in Form IV (Upper School).	Composition.	Literature.	History.	Algebra.	Geometry.	Physics.	Chemistry.	Latin.	Reading.	Writing.	Spelling.	Bookkeeping, etc.	Art.	Biology.
48	16	17	16	.....	49	49	49	49	49	49	31	43	49	49	49	28	.....	....
49	15	28	38	.....	81	81	81	81	81	81	81	74	81	81	81	51	51	....
50	13	9	13	.....	35	35	35	35	35	35	22	13	35	22	22	22	22	....
51	62	39	34	.....	135	115	123	118	118	73	51	110	84	62	62	75	76	....
52	7	12	6	.....	25	25	25	25	18	24	24	21	19	19	19	19	19	24
53	18	31	29	.....	78	78	78	78	60	67	67	58	56	.....	.....	56	56	56
54	18	23	31	5	77	77	77	77	77	77	77	59	34	18	18	18	34	34
55	32	33	34	1	100	100	100	99	68	68	68	91	100	100	100	65	65	65
56	19	19	24	3	65	63	65	65	63	65	65	36	38	38	19	60	60	60
57	9	17	13	.....	39	39	39	39	39	39	13	39	9	9	9	9	9	30
58	16	9	4	.....	29	29	29	29	29	29	8	25	29	21	.....	21	21	21
59	24	22	28	.....	74	74	74	74	74	74	74	51	46	46	46	24	46	46
60	23	8	21	2	54	54	54	54	32	54	54	53	30	30	30	30	30	30
61	13	11	21	1	46	46	46	46	46	46	33	14	22	22	22	22	22	22
62	22	20	28	.....	70	70	70	70	70	70	28	42	42	22	.....	22	42	42
63	24	13	17	.....	54	54	54	54	54	54	54	52	54	54	54	37	54	37
64	14	9	13	.....	36	36	36	32	28	30	32	22	20	20	28	20	20	20
65	10	7	18	.....	35	35	35	35	35	35	35	35	15	.....	.....	10	15	....
66	15	13	13	.....	41	41	41	41	26	41	41	22	37	28	37	28	37	37
67	10	10	17	.....	37	37	37	37	37	37	37	18	37	20	37	20	20	20
68	8	.....	2	.....	10	10	10	10	10	10	10	.....	10	10	10	10	10	10
69	30	18	15	.....	63	63	63	63	63	37	10	25	63	26	53	26	26	39
70	10	9	5	.....	24	24	24	24	24	24	24	11	24	19	19	19	19	19
71	13	7	4	.....	24	24	24	24	24	24	24	22	20	20	20	20	20	20
72	22	9	8	.....	39	39	39	39	39	39	15	38	39	.....	31	22	22	31
73	25	23	21	.....	69	69	69	69	69	69	44	28	48	48	25	25	48	48
74	18	7	.....	.....	24	24	24	24	24	20	20	20	24	25	24	25	24	....
75	18	16	25	.....	59	59	59	59	59	59	59	55	34	59	34	16	16	34
76	13	5	15	.....	33	33	33	33	33	33	33	10	16	16	.....	16	16	16
77	11	12	18	.....	41	41	41	41	41	41	41	41	41	23	23	23	23	23
78	9	14	....	.....	23	23	23	23	23	23	23	10	23	23	23	23	23	17
79	25	19	25	.....	69	69	69	69	69	69	65	39	69	69	69	55	55	55
80	8	19	12	.....	39	39	39	39	39	38	38	14	25	27	.....	27	27	27
81	15	8	16	.....	39	39	39	39	39	39	16	23	39	39	23	15	23	39
82	16	10	....	.....	26	26	26	25	25	25	25	23	26	26	26	26	26	25
83	17	10	.....	.....	27	27	27	27	27	27	21	18	21	16	16	16	17	18
84	16	19	1	.....	34	34	34	34	34	34	34	19	35	35	35	35	33	34
85	10	25	....	.....	35	35	35	35	35	35	35	28	35	35	35	35	35	35
86	36	12	.....	.....	48	48	48	48	48	48	.....	34	48	48	.....	48	28	48
87	48	29	60	8	145	145	145	145	145	145	145	87	145	78	78	78	136	145
88	28	18	29	...	70	70	69	70	69	69	69	61	70	41	41	40	31	....

GRADE A.—*Continued.*

December, 1907.—*Continued.*

								Examination Results.									
	Geography.	Grammar.	French.	German.	Agriculture.	Household Science.	Candidates for District Certificates.	Number that passed.	Candidates for Junior Teachers.	Number that passed.	Number that obtained Honours.	Candidates for Senior Teachers.	Number that passed.	Number that obtained Honours.	Candidates for Junior Matriculation.	Number that passed.	Number that obtained Honours.
48	37	49	36	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	4	2	.....
49	81	81	47	.....	.....	....	.....	.....	10	9	4	.....	.....	.....	8	5	.....
50	35	35	.....	.....	.....	.....	.....	.....	7	3	.....	.....	.....	.....	.....	.....	.....
51	109	135	70	.....	.....	.....	.....	.....	12	9	3	.....	.....	.....	4	1	.....
52	24	25	7	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
53	78	78	32	.....	.....	.....	.....	.....	10	9	2	.....	.....	.....	8	5	.....
54	77	77	.....	.....	.....	.....	.....	.....	11	8	2	2	2	.....	2	1	.....
55	100	100	90	.....	.....	.....	.....	.....	7	6	1	.....	.....	.....	3	2	.....
56	5	3	56	.....	.....	.....	.....	.....	4	3	1	.....	.....	.....	2	2	.....
57	39	39	.....	.....	.....	.....	.....	.....	6	4	2	.....	.....	.....	1	... ..	.....
58	29	29	23	.....	.....	.....	6	6	.....	.....	.....	.....	.....	.....	...	.....	.....
59	74	74	18	.....	.....	.....	.....	.....	10	1	.....	.....	.....	.....	4	1	.....
60	54	54	16	.....	.....	.....	.....	.....	7	2	2	.....	.....	.....	.....	.....	.....
61	44	44	10	.....	.....	.....	.....	.....	10	7	.....	.....	.....	.....	.....	.....	.....
62	42	70	26	.....	.....	.....	.....	.....	6	4	1	.....	.....	.....	4	1	.....
63	54	54	48	4	.....	.....	.....	.....	5	5	3	.....	.....	.....	5	5	1
64	34	36	28	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	1	.....	.....
65	35	35	35	.....	.....	.....	.....	.....	8	5	1	.....	.....	.....	.....	.....	.....
66	41	41	30	.....	.....	.....	.....	.....	4	.....	.....	.....	.....	.....	3	1	.....
67	37	37	.....	....	.....	.....	2	2	3	1	.....	.....	.....	.....	1	.....	.....
68	10	10	.....	.....	.....	.....	(Class started September, 1907).										
69	63	63	25	.....	.....	.....	7	7	9	4	.....	.....	.....	.....	.....	.....	.....
70	24	24	....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....
71	24	24	22	.....	.. ..	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....
72	39	39	39	.....	.....	.....	2	2	1	1	.....	.....	.....	.....	1	.....	.....
73	69	69	28	.....	.....	.....	.....	.....	10	6	.....	.....	.....	.....	1	.....	.....
74	24	24	.....	.....	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
75	34	34	50	.....	.....	.....	.....	.....	6	4	2	.....	.....	.....	2	2	2
76	33	33	1	.....	.....	.....	.....	.....	6	3	1	.....	.....	.....	.....	.....	.....
77	41	41	14	24	.....	.....	.....	.....	6	4	2	.....	.....	.....	10	6	2
78	23	23	8	.....	.....	.....	4	2	.....	.....	.....	.....	.....	.....	.....	.....	.....
79	65	69	41	.....	.....	.....	1	1	5	1	1	.....	.....	.....	7	3	.....
80	39	39	18	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	1	.....	.....
81	39	39	23	.....	.....	.....	1	1	1	1	.....	.....	.....	.....	.....	.....	.....
82	26	26	16	.....	23	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
83	22	23	8	.....	.. ...	.....	(Class started September, 1907)										
84	34	34	17	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....
85	35	38	..	.....	.....	.....	.....	.....	9	.....	.....	.....	.....	.....	.....	.....	.....
86	48	48	29	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
87	137	137	19	1	.....	.....	.....	.....	13	9	.....	3	2	.....	7	5	.....
88	69	70	27	.....	.....	.....	.....	.....	9	2	.....	.....	.....	.....	4	4	.....

CONTINUATION CLASSES,

Statistics for the year ending 31st

	Destination of Pupils.						Occupation of Parents.					Value of Equipment					
	Agriculture, etc.	Mercantile Life.	Teaching.	Other Professions.	Mechanical Occupations.	Other Pursuits.	Agriculture, etc.	Mercantile Life.	Professions.	Mechanical Occupations.	Other Pursuits.	Maps, Charts, Globes, etc.	Scientific Apparatus.	Library.	Drawing Models, etc.	Total Value of Equipment.	Value of Additions, 1907
												$	$	$	$	$	$
48	....	2	1	2	1	2	17	22	4	4	2	15	165	51	5	229	110
49	....	2	9	8	4	.....	38	15	7	5	16	60	350	150	25	585	.....
50	....	.....	3	.....	.....	1	5	4	1	2	23	25	125	60	25	235	.....
51	....	.....	7	.....	.....	9	39	25	9	11	51	18	112	65	5	200	23
52	2	1	.....	.....	.....	.....	17	7	.....	.....	1	.....	81	9	4	94	80
53	2	4	4	1	.....	8	39	7	5	14	13	50	200	108	5	363	87
54	....	6	7	1	1	7	33	8	5	21	10	60	116	102	5	283	90
55	7	3	3	2	1	4	39	16	2	15	28	43	178	58	33	312	184
56	3	.....	3	.....	.....	6	29	9	2	8	17	73	136	21	15	245	93
57	1	2	.....	4	3	4	17	3	2	6	11	70	165	50	.....	285	25
58	1	2	.....	3	.....	3	8	4	4	5	8	35	25	.....	.....	60	.....
59	2	2	1	2	2	8	10	7	3	6	48	50	325	20	.....	395	25
60	....	2	2	1	.....	1	21	8	1	5	19	2	204	23	10	239	20
61	2	.....	6	1	.....	6	22	3	2	15	4	50	175	40	.....	265	15
62	2	3	5	4	.....	4	35	5	3	15	12	37	20	150	.....	207	.....
63	3	.....	5	5	.....	.....	33	10	2	8	1	26	67	22	.....	115	81
64	1	1	1	.....	1	6	9	7	1	5	14	25	86	10	.....	121	46
65	....	.....	2	.....	.....	.....	9	2	1	2	21	52	108	67	.....	227	.....
66	1	1	1	.....	.....	6	21	11	6	3	.....	3	86	39	.....	128	53
67	....	.....	5	.....	.....	4	24	4	2	2	5	2	130	11	.....	143	.....
68	....	.....	.....	.....	.....	.....	.....	6	.....	2	2	10	60	25	.....	95	95
69	....	.....	10	.....	1	3	17	8	5	20	13	5	160	75	.....	240	50
70	....	.....	1	.....	.....	7	5	3	.....	.....	16	26	20	.....	.....	46	.....
71	....	.....	.....	.....	.....	.....	2	6	.....	3	13	28	334	175	28	565	425
72	....	1	1	.....	.....	2	.....	27	2	3	7	50	200	80	4	334	164
73	6	4	3	2	5	.....	36	8	1	19	5	.....	150	.....	.....	150	.....
74	...	1	.....	.....	1	2	7	3	1	4	10	32	90	75	8	205	180
75	1	1	.....	.....	2	11	19	2	5	6	27	25	300	75	.....	400	10
76	2	1	2	.....	.....	6	22	3	3	3	2	.....	150	137	5	292	209
77	1	4	1	1	.....	5	12	16	3	2	8	38	160	51	2	251	112
78	....	3	.....	1	.....	5	7	5	1	3	7	.....	75	25	.....	100	.....
79	1	2	6	2	.....	9	12	20	6	15	16	18	125	.....	2	145	45
80	1	1	2	.....	1	9	18	5	1	2	13	25	200	.....	.....	225	76
81	1	.....	2	.....	.....	.....	38	.....	.....	1	.....	26	165	62	.....	253	15
82	....	1	.....	1	.....	1	6	2	1	8	9	27	90	20	3	140	140
83	....	.....	.....	.....	.....	.....	9	4	2	4	8	25	250	150	25	450	450
84	2	1	.....	1	1	5	8	12	4	10	2	40	175	10	.....	225	.....
85	4	.....	.....	.....	.....	5	4	2	2	16	11	25	125	15	.....	165	.....
86	2	2	.....	.....	2	12	19	15	2	5	7	63	80	28	.....	171	37
87	18	10	17	6	8	11	78	24	10	12	21	50	300	300	50	700	625
88	5	4	6	4	.....	3	31	14	1	4	20	31	174	15	3	223	46

GRADE A.—*Continued.*

December, 1907.—*Continued*

Fees.			Teachers for 1908.	
Monthly Fee of Pupils of Section.	Monthly Fee of other Pupils.	Basis of Special County Grant, if any.	Names and Degrees.	Salary.
$ c.	$ c.			$
48	1.00		V. K. Greer	750
49 50c., 75c., $1.	1.00	100% extra.	J. H. Cameron	1,000
			Helen D. Ford	600
50 .75	.75	100% extra.	Jos. Stalker	700
51 1.00	1.00	100% extra.	L. C. Fleming	1,020
			Stella L. Gregory	600
			Agnes M. Johnston	600
52 $1.00, $2.00.	2.00	100% extra.	C. K. Bluett	650
			Miss S. Robinson	365
53	1.00		A. A. Merritt	1,000
			Bessie McCamus	500
54	.60		Miss M. Agla	700
			Miss E. M. Wise	550
55 .50	L. .60, M. 1.00		G. A. Miller	900
			Jean McConnell	525
56 .70			J. G. Cameron	950
			E Bickstedt	500
57 after 1st yr. .75	1st year .45 after .75		E. E. Hoover	700
58 1.00	1.00		Agnes R. Alexander	650
59	1.00		E. U Dickenson, B.A	1,200
			H. Tremeer	700
60 1.00	1.00			850
			Josie Switzer	600
61 .50	1.00		Thos. R. Ferguson, M.A	800
			Mary E. Lynch	400
62	1.00		R Beatty	600
63 1.00	1.00		Mina A. Ellis, B.A	800
64	50	$50 extra.	E. O. Walker	700
65	2.00	$50 extra.	Sarah Anglin	650
66	1st term 1.25 2nd " 1.00	$50 extra.	Fred P. Smith	650
67	.50		E. J. Keenan	675
68			J. Young	750
			Jas. Moriarty	800
69	1.00		M E Ludlow	700
70	.50		Myrtle Madge	700
71	.75		D. T. Wright	1,000
72			(High School established)	
73 1.00	1.15	$50 per year.	Thorhilda De Mille	550
74 1.00	1.00		J. M. Wilson	700
			Henry Wing	725
75 1.00 per term.	2.00 per term.		Miss D. E. Taylor	550
76 .45	.45		A. C. Dougherty	700
77 .50	1.00		J. G. Katzenmeyer	800
78			A. M. Woodley	800
			J. L Moore	1,000
79	.50		Alex. Burke	900
80 .50	1.25		C. F. Ewers	700
81 1.00	1.00		John A. O'Donohue	650
82			Percy S. Banes	800
83	2.00		O. McCullough	650
84	1.00		D. R Harrison	650
85	1.00		D. Currie	750
86	.50		W. A. Tydell	700
			J. A. Speers, M.A	1,000
87	1.50		Winnifred Bell	575
88 II. & III. 1.00	1.00		W. T. Baker	850
			C. M R. Ballachey	525

CONTINUATION CLASSES,

Statistics for the year ending 31st

	Inspectorate.	Name of School. School Section.	Name of School. Post Office.	Teachers. Names and Degrees of Teachers giving whole of time to Continuation Classes.
89	Simcoe, Southwest	Stayner	Stayner	W. L. C. Richardson Myrtle A. Watson
90		Tottenham	Tottenham	E. H. Lindsay Miss M. S. R. Tremeer
91		5 Essa	Cookstown	Wm. W. Scott Florence E. Purser
92	Stormont	Finch	Finch	Jas. Froats, B. A.
93		14 Roxborough	Avonmore	A. Mabel Drewry
94	Thunder Bay and Rainy River	Fort Frances	Fort Frances	J. O. Clothier, B. A.
95	Victoria, East	Bobcaygeon	Bobcaygeon	J. M. Simpson
96	Victoria, West and S.E. Muskoka	Fenelon Falls	Fenelon Falls	A. A. Cameron
97		Bracebridge	Bracebridge	D. A. MacDonald, B. A. May J. Hodgins
98	Wellington, North	Palmerston	Palmerston	C. Cameron V. W. Rutherford
99	Wellington, South	Erin	Erin	G. J. Katzenmeyer
100		Macdonald Consolidated	Guelph	J. C. McNab
101		Drayton	Drayton	John W. Yake S. E. Jackson, B. A.
102	York, North	13 E. Gwillimbury	Mt. Albert	Fred Schooley
103		14 King	Schomberg	Clarence F. Neelands
104	York, South	Woodbridge	Woodbridge	Annie G. McAllister F. Bowes
105	R. C. Separate Schools	Amherstburg	Amherstburg	Sr. M. Ethelbert Sr. M. Teresa
106		Eganville	Eganville	Sr. Ernestine
107		Westport	Westport	Sr. St. Andrew
	Totals, 1907			

GRADE A.—*Continued.*

December, 1907.—*Continued.*

How many giving whole time?	Professional Certificate.	Annual rate of Salary.	Attendance and Classification of Pupils. Total number of Pupils enrolled.	Number of Boys.	Number of Girls.	Average Age of Pupils, Sept. 1st, 1907. Form I.	Average Age of Pupils, Sept. 1st, 1907. Form II.	Average Age of Pupils, Sept. 1st, 1907. Form III.	Average Age of Pupils, Sept. 1st, 1907. Form IV.	Number who passed Entrance Exam.	Number enrolled 1st half year.	Number of Days School was open 1st half year.	Aggregate Attendance 1st half year.	Number enrolled 2nd half year.	Number of Days School was open 2nd half year.	Aggregate Attendance 2nd half year.	Number of Pupils from Section.	Number from other Sections.	How many other Sections?
89 1	I	800	72	38	34	13.	15.	17.	..	72	50	116	1,803	61	70	1,491	41	31	3
1	I	475																	
90 1	I	700	62	31	31	13.	15.	17.	..	62	44	120	3,907	34	78	1,994	30	32	9
1	I	525																	
91 1	I	800	55	28	27	13.5	14.9	15.8	..	55	53	116	4,429	55	86	5,275	45	10	7
1	I	550																	
92 1	I	525	28	10	18	14.3	14.2	17.	..	28	14	120	1,040	19	79	1,191	10	18	5
93 1	I	500	23	13	10	12.9	13.2	....	..	23	8	117	799	18	75	2,001	12	11	6
94 1	H.S.P.	1,000	28	14	14	14.7	....	16.5	..	27	15	116	1,481	18	56	745	28	.....	..
95 1	II	650	38	15	23	14.8	14.9	16.5	..	35	25	118	2,256	13	75	648	31	7	4
96 1	I	800	39	20	19	14.	15.	16.	..	39	26	109	2,157	32	77	2,069	34	5	2
97 1	I Int.	1,000	72	52	20	14.2	15.5	16.	..	72	43	115	4,729	52	77	3,555	65	7	5
1	I	500																	
98 1	I	850	59	16	43	14.1	15.2	16.5	..	56	57	119	4,969	44	77	2,749	48	11	4
1	I	500																	
99 1	I Int.	700	28	12	16	13.2	14.5	16.5	..	28	17	107	1,622	24	76	1,526	13	15	7
100 1	I Int.	600	27	9	18	13.8	....	....	..	26	16	118	1,512	11	86	746	23	4	2
101 1	I	850	91	30	61	15.	15.1	15.8	..	88	72	118	7,175	76	77	4,869	43	48	10
1	II	575																	
102 1	I	675	44	25	19	13.5	14.3	15.7	..	42	26	118	2,397	35	75	2,453	30	14	4
103 1	I Int.	625	27	9	18	14.2	14.5	16.2	..	27	13	112	1,125	23	76	1,334	11	16	8
104 1	I	600	38	18	20	14.	14.	16.	..	37	28	114	2,376	26	78	1,654	27	11	7
1	III	450																	
105 1	II Int	350	48	6	42	15.3	16.	17.2	..	44	33	121	3,297	31	73	3,124	31	17	5
1	.....	200																	
106 1	III	600	32	7	25	13.3	15.4	....	..	30	21	120	1,812	21	78	1,393	22	10	10
107 1	.....	350	38	9	29	13.	15.	17.	..	38	36	116	3,853	28	77	2,001	22	16	10
140	.....	*	4,744	1,963	2,781	...	....	....	....	4,627	3,142	....	293,359	3,476	....	230,782	3,148	1,596	653

* Average salary, Principal, $719; Assistant, $529.

CONTINUATION CLASSES

Statistics for the year ending 31st

	Number in Form I (Lower School).	Number in Form II (Lower School).	Number in Form III (Middle School).	Number in Form IV (Upper School).	Number of Pupils in the Various Subjects.													
					Composition.	Literature.	History.	Algebra.	Geometry.	Physics.	Chemistry.	Latin.	Reading.	Writing.	Spelling.	Bookkeeping, etc.	Art.	Biology.
89	38	15	19	.....	72	72	72	72	72	72	72	38	72	53	53	72	72	72
90	18	11	33	.....	62	62	62	62	62	62	31	25	29	29	29	29	31	18
91	15	16	24	.....	55	55	55	55	55	55	55	55	55	55	55	19	19	55
92	16	7	5	.....	28	28	28	28	28	28	28	21	28	28	28	24	24	28
93	17	6	.....	.....	23	23	23	23	23	8	.....	19	23	20	23	19	19	....
94	17	.....	11	.....	28	28	28	28	27	28	22	11	28	27	27	19	19	19
95	11	17	10	.....	38	38	38	38	27	38	27	.....	38	38	11	15	15	....
96	13	6	20	.....	39	39	39	39	20	35	30	20	39	39	19	20	20	20
97	38	13	21	.....	71	72	69	72	69	21	21	20	72	72	72	51	58	56
98	23	16	20	.....	59	59	59	59	59	57	18	59	59	39	.....	59	39	39
99	13	4	11	.....	28	28	28	28	28	15	15	23	28	17	.....	17	17	17
100	27	.....	.....	.....	27	27	27	26	23	27	27	14	27	27	27	27	27	27
101	17	26	48	.....	91	91	91	91	91	91	48	90	80	67	67	67	67	91
102	26	6	12	.....	44	44	44	44	44	44	12	37	44	44	.....	32	.....	44
103	17	6	4	.....	27	27	27	27	12	27	6	26	27	27	27	19	19	21
104	12	8	18	.....	38	38	38	38	38	38	28	34	38	38	38	26	26	....
105	29	6	13	.....	48	48	40	40	40	40	19	.....	48	48	48	34	40	24
106	15	17	.....	.....	3	32	32	32	32	32	21	5	32	32	32	9	28	32
107	5	12	21	.....	38	38	38	38	38	38	21	38	38	38	38	38	38	38
	1,825	1,360	1,538	21	4,738	4,715	4,705	4,687	1,512	4,433	3,460	3,269	4,094	3,406	2,870	2,993	3,218	2,938

GRADE A.— *Continued.*

December, 1907.—*Continued.*

	Geography.	Grammar.	French.	German.	Agriculture.	Household Science.	Examination Results.										
							Candidates for District Certificates.	Number that passed.	Candidates for Junior Teachers.	Number that passed.	Number that obtained Honours.	Candidates for Senior Teachers.	Number that passed.	Number that obtained Honours.	Candidates for Junior Matriculation.	Number that passed.	Number that obtained Honours.
89	72	72	30	.....	.....	.....	2	2	7	2	1	.....	.....	.....	3	.....	.....
90	44	62	18	.....	.....	.....	.....	.....	16	10	1	.....	.....	.....	5	4	1
91	55	55	23	.....	19	.....	.....	.....	10	.....	.....	.....	.....	.....	.....	.....	.....
92	26	28	6	.....	.....	.....	1	1	.....	.....	.....	.....	.....	.....	2	2	.....
93	23	23	15	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
94	28	28	19	.....	.....	.....	4	1	4	.....	.....	.....	.....	.....	1	1	.....
95	38	38	.....	.....	.....	.....	.....	.....	4	3	.....	.....	.....	.....	1	1	.....
96	39	39	15	15	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
97	69	72	25	.....	.....	.....	3	3	9	.....	.....	.....	.....	.....	.....	.....	.....
98	59	59	59	.....	.....	.....	.....	.....	9	5	.....	.....	.....	.....	7	5	.....
99	28	28	.....	.....	.....	.....	.....	.....	5	2	1	.....	.....	.....	.....	.....	.....
100	27	27	13	9	.....	18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
101	91	91	51	9	.....	.....	.....	.....	20	4	1	.....	.....	.....	15	11	.....
102	44	44	2	.....	.....	.....	.....	.....	3	1	.....	.....	.....	.....	1	1	.....
103	27	27	13	7	.....	.....	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	.....
104	38	38	38	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	.....	5	3	.....
105	48	48	10	.....	.....	.....	4	3	6	1	.....	.....	.....	.....	.....	.....	.....
106	32	32	17	.....	.....	.....	6	3	.....	.....	.....	.....	.....	.....	.....	.....	.....
107	38	38	17	.....	.....	.....	.....	.....	11	2	.....	.....	.....	.....	.....	.....	.....
	4,484	4,637	2,198	114	53	18	62	53	472	202	46	5	4	.....	175	106	7

CONTINUATION CLASSES,

Statistics for the year ending 31st

	Destination of Pupils.						Occupation of Parents.					Value of Equipment.					
	Agriculture, etc.	Mercantile Life.	Teaching.	Other Professions.	Mechanical Occupations.	Other Pursuits.	Agriculture, etc.	Mercantile Life.	Professions.	Mechanical Occupations.	Other Pursuits.	Maps, Charts, Globes, etc.	Scientific Apparatus.	Library.	Drawing Models, etc.	Total Value of Equipment.	Value of Additions, 1907.
												$	$	$	$	$	$
89	2	5	4	.....	2	.....	22	27	2	4	17	25	170	160	25	380	130
90	2	2	10	.....	1	2	29	10	3	4	16	25	225	150	50	450	350
91	3	3	....	....	.....	6	37	9	1	8	.....	15	250	15	.....	280	175
92	1	1	1	.....	.....	6	17	.....	1	8	2	15	53	25	.....	93	....
93	3	.....	....	....	.....	.....	16	5	.....	.....	2	20	35	35	5	95	42
94	1	....	2	.....	1	5	3	3	2	8	12	35	216	5	.....	256	16
95	1	1	3	1	.....	1	10	1	7	3	17	20	50	25	5	100	52
96	2	6	.....	.....	5	4	10	6	4	9	10	82	55	25	.....	162	60
97	...	.....	1	.....	4	1	15	11	10	17	19	128	300	150	2	580	.....
98	....	3	4	2	2	4	12	7	5	15	20	25	300	25	25	375	100
99	1	1	1	1	.....	.....	13	2	2	1	7	15	80	35	.....	130	25
100	5	.....	.....	.....	1	10	22	.....	3	.....	2	107	254	40	10	411	.....
101	4	1	1	1	.....	4	10	5	5	11	30	41	286	21	4	352	60
102	2	2	1	1	2	1	15	8	2	8	11	10	215	5	.....	230	140
103	2	1	1	1	.....	3	23	2	2	.....	.....	9	65	50	.....	124	5
104	1	2	1	.....	.....	6	17	13	1	3	4	100	150	....	.....	250	50
105	1	7	7	...	....	.....	19	8	2	7	12	60	585	275	28	948	120
106	...	1	3	1	1	6	12	6	1	7	6	11	106	323	25	468	343
107	2	1	2	1	3	.....	22	1	.....	8	7	25	65	83	2	175	50
	175	177	248	85	75	417	1,918	789	288	661	1,088	3,098	16,369	6,063	815	26,345	9,092

GRADE A —*Concluded.*

December, 1907.—*Concluded.*

Fees			Teachers for 1908.	
Monthly Fee of Pupils of Section.	Monthly Fee of other Pupils.	Basis of Special County Grant, if any.	Names and Degrees.	Salary.
$ c.	$ c.			$
89 .50	1.00		W. L. C. Richardson	800
90 1.00	1.00		E. H. Lindsay	700
			Miss M. S. R. Tremeer	525
91 .50	.50		W. M. Scott	800
			Florence E. Purser	600
92 1.00	1.00	50% extra.	Miss M. Cole	600
93 .50	.50	50% extra.	A. M. Drewry	500
94			J. O. Clothier, B.A.	1,000
95	1.00		J. M. Simpson	700
96	1.00		A. A. Cameron	800
97 .50	1.00		D. A. MacDonald, B.A.	1,000
			May J. Hodgins	530
98	.50		C. Cameron	900
			V. W. Rutherford	500
99 1.00	1.00		G. J. Katzenmeyer	750
100			E. A. Howes	600
101 1st year free. 2nd " .50. 3rd " 1.00.	1.00		John W. Yake	900
			S. E. Jackson, B.A.	575
102 1.00	1.00		Fred Schooley	710
103 1.00	1.00		Clarence F. Neelands	625
104 1.00	1.00		Annie G. McAllister	600
			F. Bowes	150
105	.75	50% extra.	Sr. M. Ethelbert	350
			Sr. M. Teresa	200
106	.75		Sr. Ernestine	600
107	.50		Sr. St Andrew	350

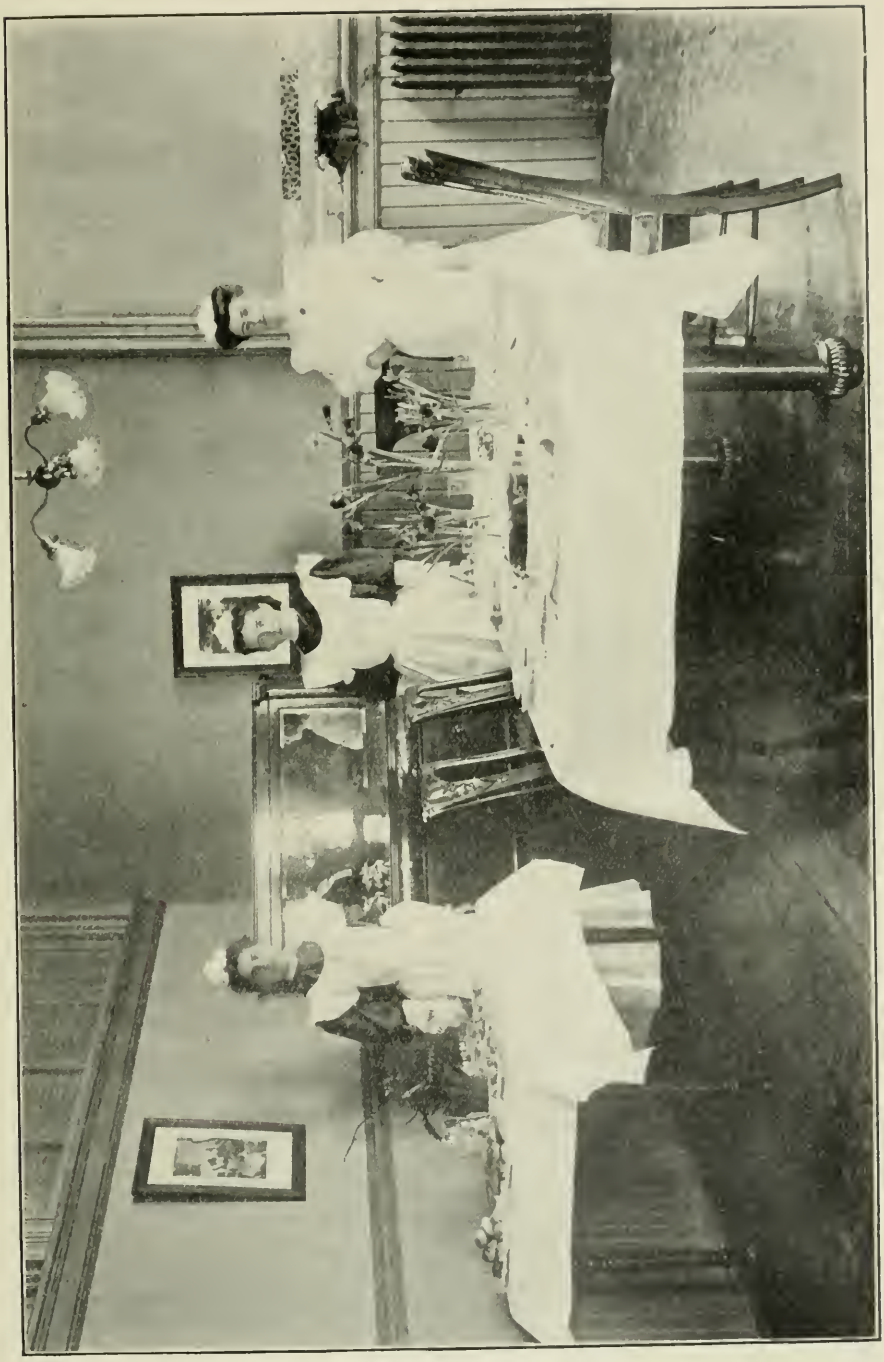


Table for Luncheon Cooked and Served by Ottawa Normal Students.

made in the Kindergarten, for at that early period the muscles are in a plastic condition, and as age advances training becomes a more difficult matter. He further declared that two weeks' practice in the kindergarten will make a child right handed for life.

A little reflection will disclose the fact that the beginning of Technical Education is to be found very early in the school career, in fact as pointed out above the elementary exercises of the Kindergarten are its beginnings, and in Public Schools with any organized system of Manual Training or Constructive Work, Technical Instruction has already been well begun. So also in the course of elementary instruction every illustration or suggestion which exhibits the application of the sciences or of knowledge to the practical affairs of life, every lesson in writing or drawing which stresses the utility of these subjects is essentially a form of Technical Education. Arithmetic, history, algebra, geography, etc., are treated in the Primary Schools as instruments of mental training and culture, yet from time to time they are shown in their practical aspects and when this is so, the instruction becomes to that degree, and in the wider sense truly technical. When these facts are remembered, it becomes evident that in a very real and important sense technical education belongs to every stage of the school career. At no point is general culture free from technical elements, and the converse is true that no good scheme of technical education is free from elements that may be considered as contributory to general culture.

Recognizing the fact that early hand training was an essential step towards industrial efficiency, the Department in the last revision of the course of study (1904) outlined the work in these subjects as follows:

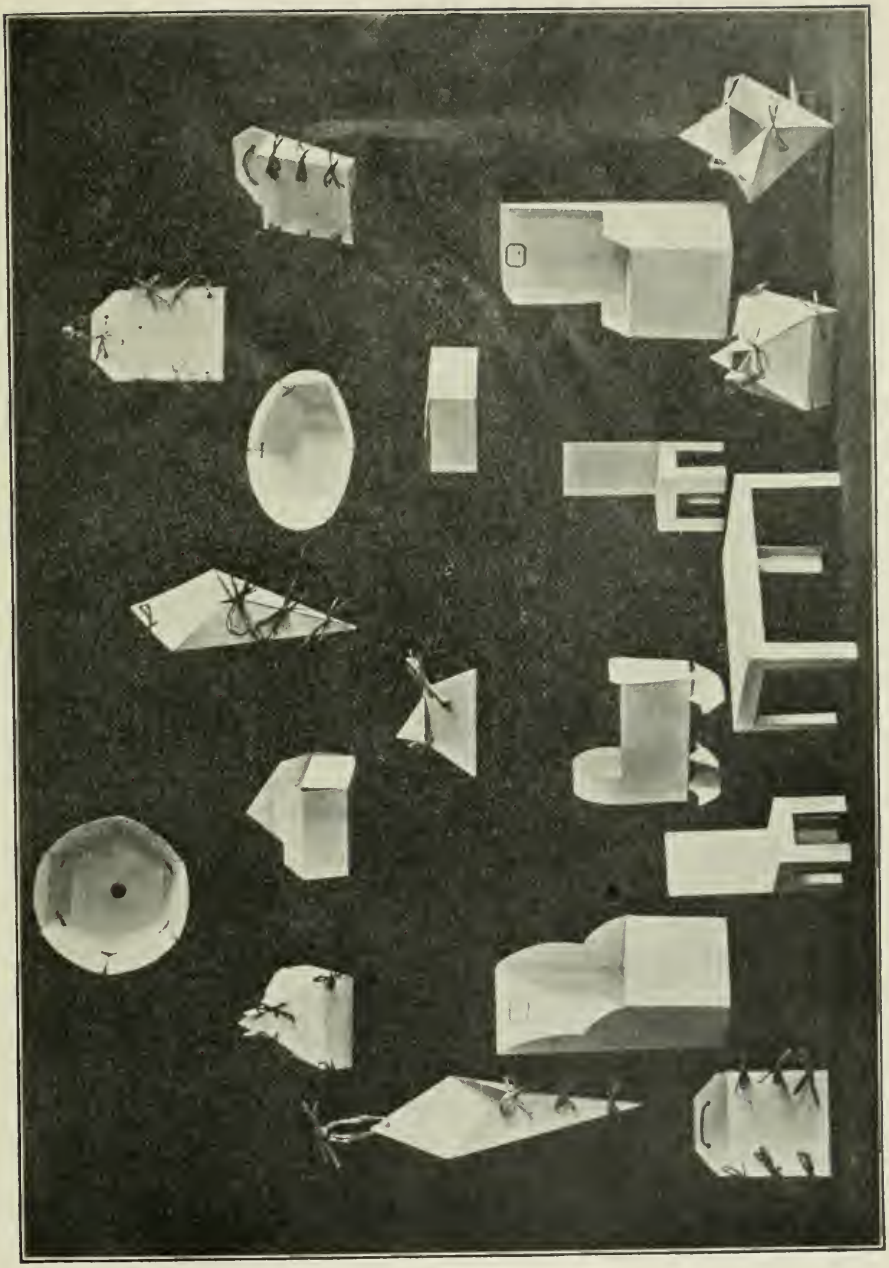
Art.—As means of expression, the Art subjects should be connected closely with nature work, constructive work, history and literature. Many pictures should be used in the lower classes, and each subject should be illustrated with the child's free expression. As in writing special attention should be given to the attitude of the body and the position of the paper and the pencil, etc.

Constructive Work.—The object of constructive work is mental development and physical control. The making of things should be subsidiary to the thought processes involved, and the exercises should sustain the child's interest, and take advantage of his natural desire to construct. Constructive Work should make the ability to do a part of the knowing, and should incorporate knowledge into habit and theory with practice. The amount of work accomplished is unimportant in comparison with the mastery of correct methods and the formation of good habits. Every opportunity should be given the pupils to modify given type models or to design new ones, and in the lower grades to rearrange given units or create new combinations. All of the work should have in it the elements of beauty in construction, in proportion, and in decoration. Though we may not be able to add to the quantity or the variety of the material, we can modify its form, and we can arrange it in new combinations. The making of new forms and combinations, the giving of definite expression to ideas and mental images, the rendering of the inner outer, is the great Froebelian doctrine of creativeness.

Form I.

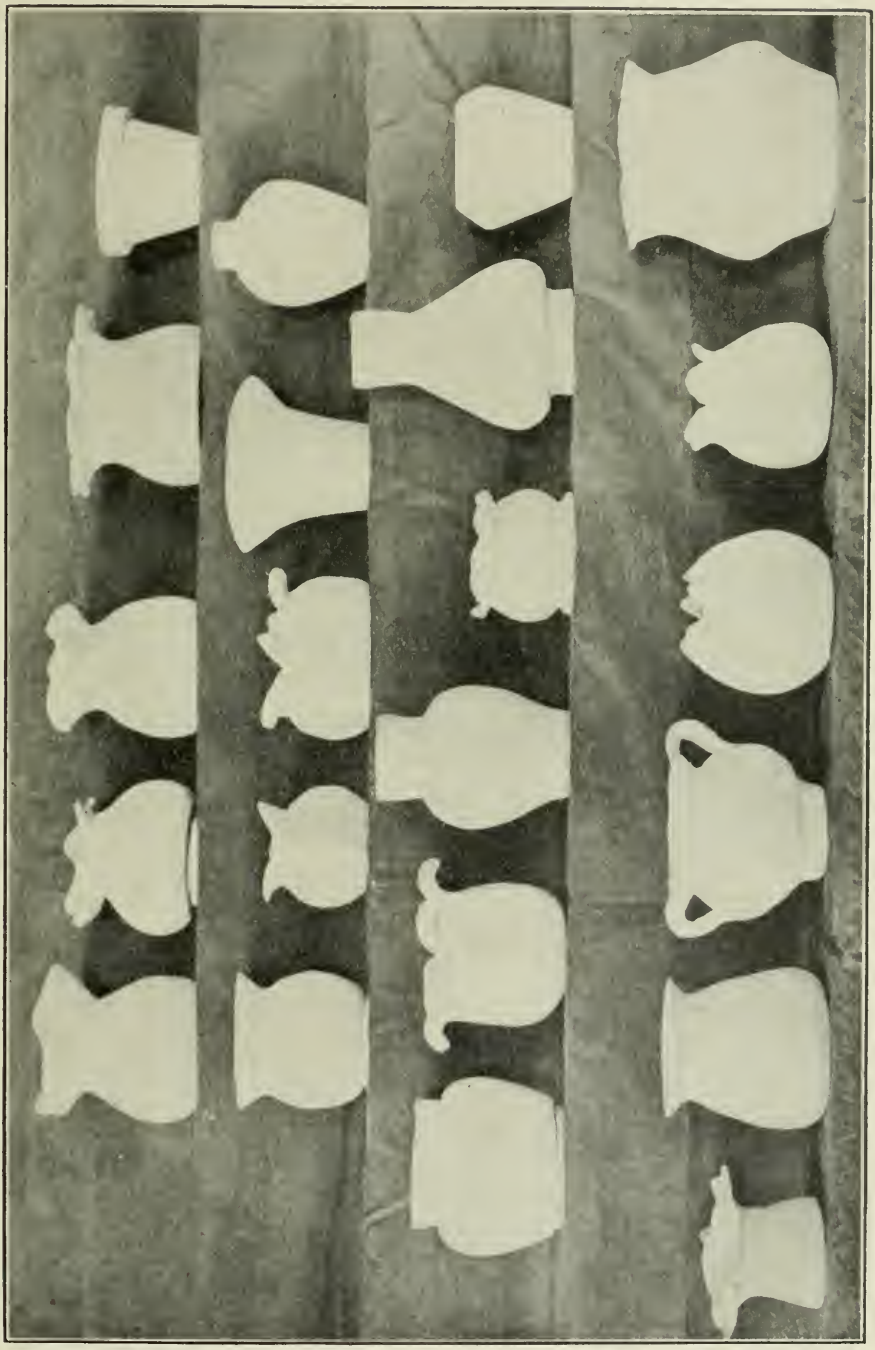
Art.—Freehand expression with pencil, pen, crayon, and water colour. Six standard colours.

Blackboard and pencil drawing (free movement).—Simple natural objects and other objects in which children are interested, as toys, dolls, etc.

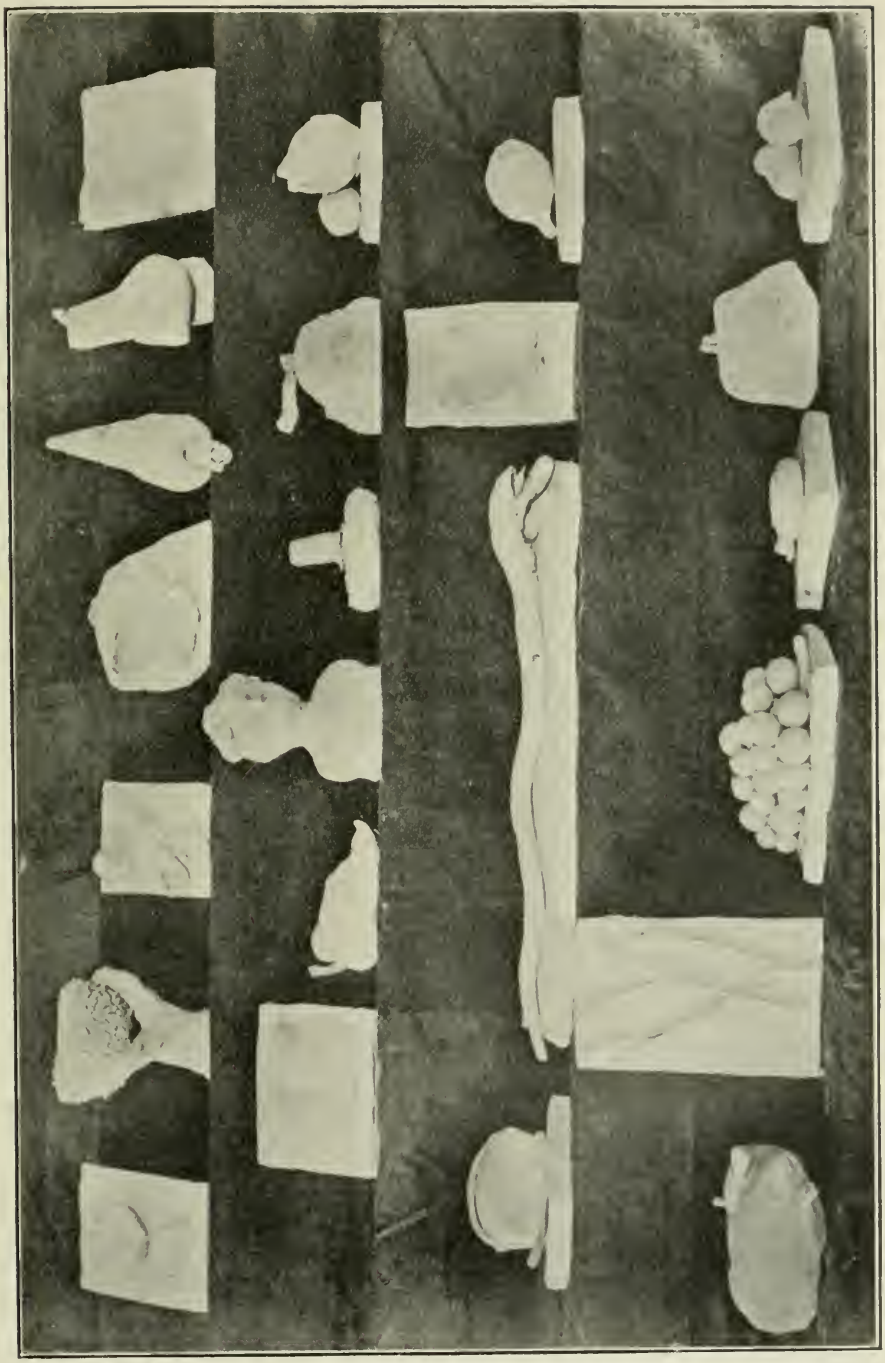


Elementary Construction in Paper and Cardboard, Toronto Normal School.

Clay Modelling, Ottawa Normal School.



Clay Modelling, Toronto Normal School.



Clay Modelling, Toronto Normal School.

Water colours or coloured crayons.—Simple grasses, leaves, sprays, flowers, fruits, birds, pet animals, etc., studied in nature work.

Colour, pencil, or ink illustrations of stories; study of pictures.

Constructive Work.—Paper cutting and folding in elementary geometric patterns, colouring and grouping of these as bases of design; this work to be connected with drawing and modelling in clay.

Making of objects as picture frame, window, envelope, etc.

Basket and raffia work.

Clay Modelling.—Natural objects, as orange, apple, onion, tomato, potato, egg, simple leaf.

Common objects, as box, bird's house, small loaf of bread, cup (without handle) and saucer, flower pot and saucer, basket, tea set and tray.

NOTE.—In the above all modelling should be done from the actual object, as many being provided as will enable each child to make a thorough examination.

Free modelling.

NOTE 1.—Under this head the children should make what they wish, and should be encouraged to invent forms and patterns for themselves.

NOTE 2.—Clay modelling should be so treated as to become an aid to conception of form. It should also be correlated with nature study.

FORM II.

Art.—Study of colour continued. Colour and freehand expression.

Free drawing of plants and other common objects; pencil sketches of common objects.

Water colours: Fall flowers and leaves with brilliant autumn tints; butterflies and other insects; live and mounted birds; fish, etc.

Memory, imaginative, and illustrative drawing.

Study of pictures.

Constructive Work.—Work of Form I. continued. Paper cutting for simple patterns and designs. Ruling in geometric forms and colouring these. Simple cardboard and paper construction, as wall-box, chair, tray, etc. Ornamentation of constructed objects by colouring and drawing. Modification of models; original work. Basket and raffia work.

Clay Modelling.—Natural forms: Apple, beet, banana, leaf, apple and twig, etc.

Common objects: Cup with handle and saucer, flower pot, bat, piece of coal, etc.

Free modelling.

Needlework.—Simple stitches; sewing on buttons and hooks; simple mending.

FORM III.

Art.—Drawing of plants, insects, etc., in any appropriate medium.

Arrangement in spaces, applications in borders, surface patterns and rosettes in colour, applied as far as possible in connection with Constructive Work.

Relative positions of views of geometrical figures in thin cardboard; simple geometrical problems. Study and drawing of details of Greek ornament and vase.

Water colour: Course of Form II. continued.

Simple landscapes from window or out-of-doors.

Study of Pictures.

Constructive Work.—Cardboard construction and ornamentation continued. Whittling in wood with a knife.

Basket and raffia work.

Needlework.—Plain hemming and back-stitching; making button-holes; fine mending.

FORM IV.

Art.—The course of Form III. continued.

Adaption of natural forms to purposes of decorative design.

Freehand perspective.

Simple geometrical drawing, combination of units of design in geometric patterns, combination of scrolls and geometric units for industrial and ornamental work.

Working drawings of type forms.

Simple geometrical problems.

With reference to the curriculum the regulations read "All the subjects prescribed for Forms 1-4 of the Public School course are obligatory except where otherwise stated in the programme of studies and (3) when from any cause teachers properly prepared to teach the courses in Art, Constructive Work, Cardboard Modelling, etc., are not available the Inspector shall authorize such modifications of the courses in these subjects as he may deem expedient."

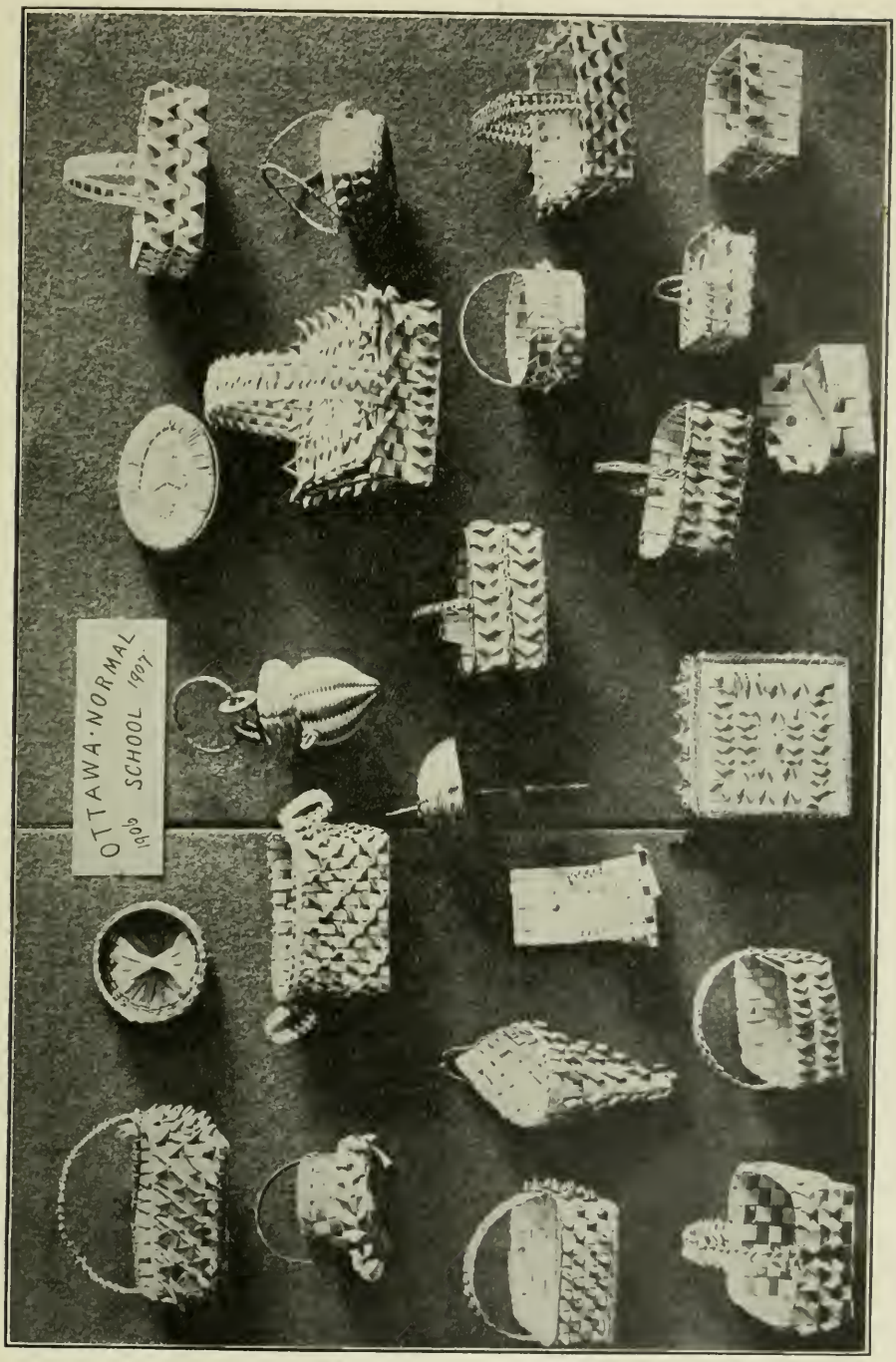
With a view towards discovering how far these subjects were being taught in the Public Schools of the Province, I addressed a letter to every Public School Inspector asking for "particulars as to the character and extent of the work being done in your inspectorate in the course in Art, Constructive Work and Needle Work as outlined on pages 53, 55, 57 and 58 of the Regulations."

The replies received to this circular, lead one to the conclusion that these subjects are in a large number of cases not taken seriously, and are either not taught at all or only in a very haphazard manner. The clause in the regulations which authorizes the Inspector to make "such modifications of the courses in these subjects as he may deem expedient" has in many cases been read as authorizing their total elimination. In many cases no reply was received and for this reason I am not able to state accurately the number of schools where this work is being taken. Below are given extracts from some of the replies.

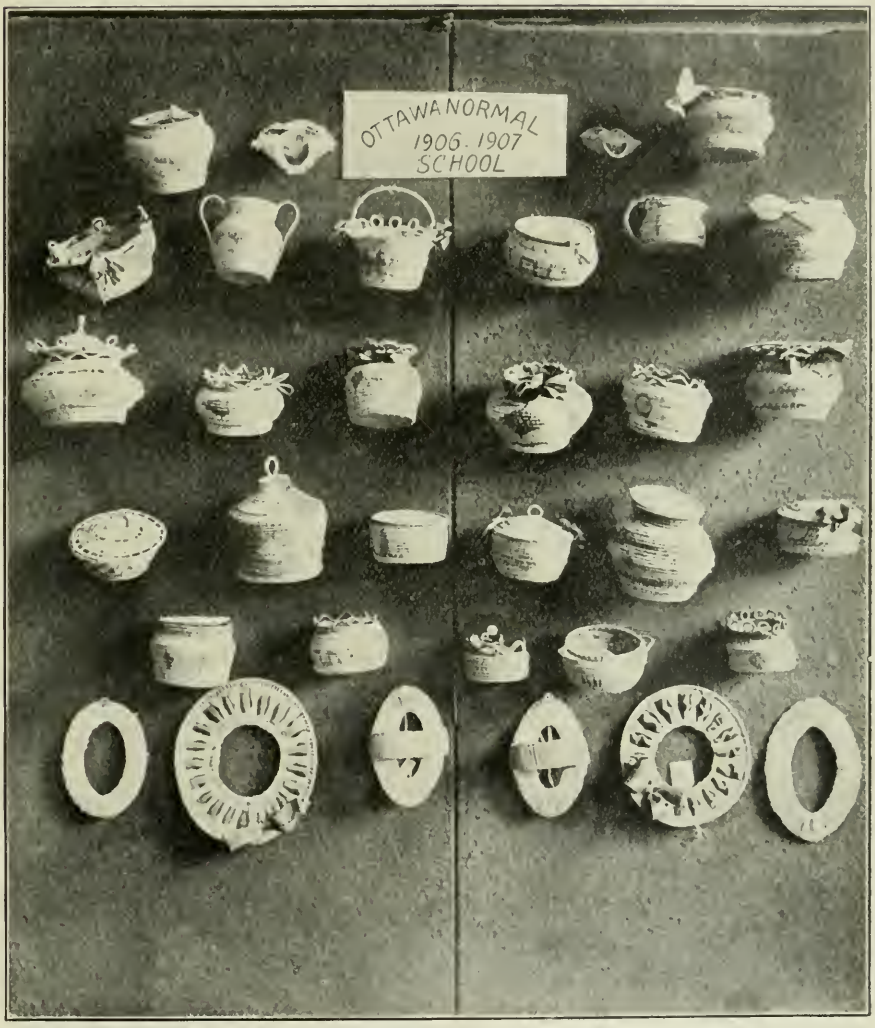
Mr. D. A. Maxwell (South Essex) " In this Inspectorate we have in my estimation inefficient teaching of drawing in all classes in the Public Schools and a little daubing of colour in three or four schools. There is only one teacher in our schools who can teach colour work efficiently. Constructive Work and Needlework are not attempted."

Mr. John Johnson (South Hastings) "I do not think that there has been any work done in the course in Art, Constructive Work, and Needlework as outlined in the regulations."

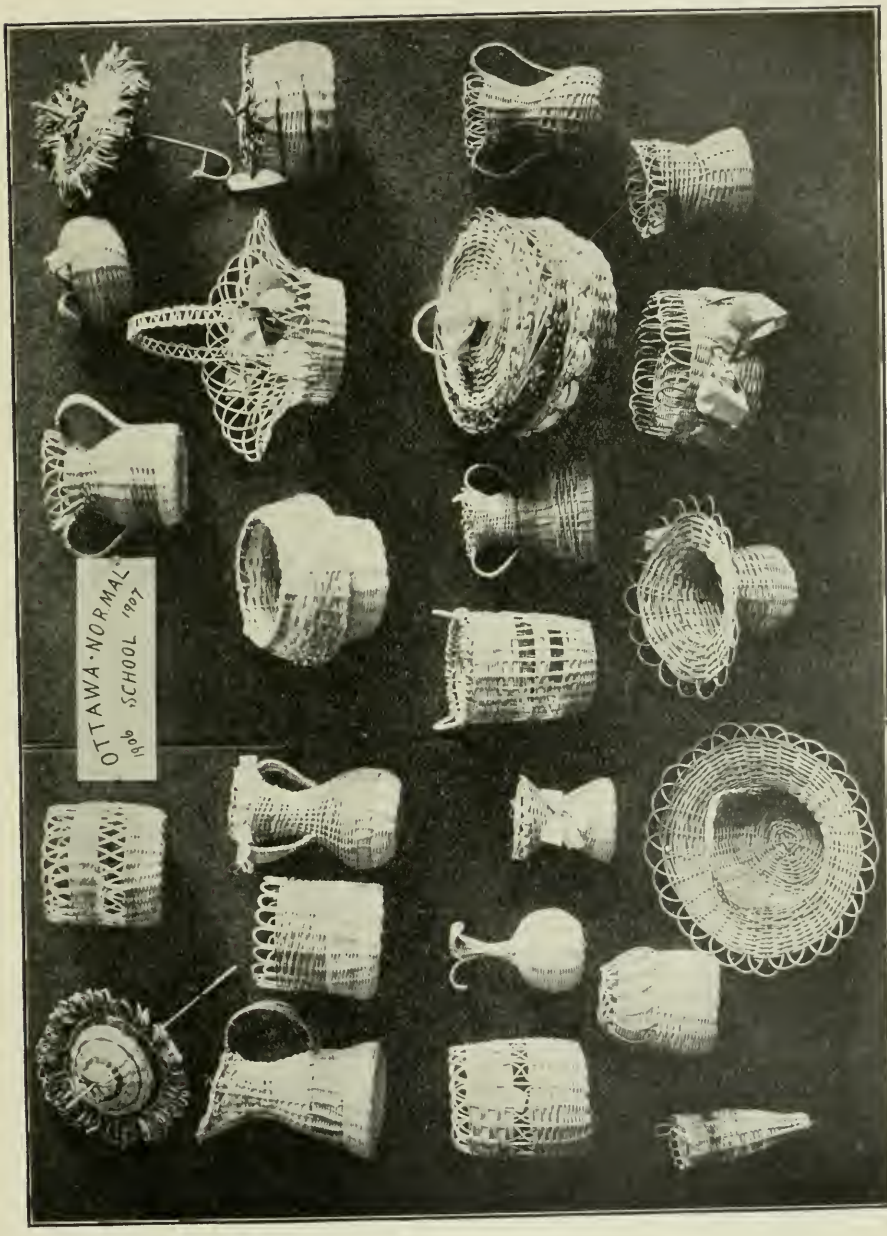
Mr. J. Ritchie (Rainy River and Thunder Bay) "Considerable attention has been devoted to the Art or Drawing department especially to grasses, leaves, sprays, flowers and fruits with coloured crayons in the Public Schools of Port Arthur, Fort William and Kenora. The pupils appear to be particularly interested in drawing the brightly coloured autumn leaves and the perfection attained by some of the little ones in the delicate shadings and blendings is marvelous. During my recent inspection of the Port Arthur Schools I had the opportunity of examining many of these drawings which were displayed on the walls of the rooms. This method of exhibiting the artistic work of



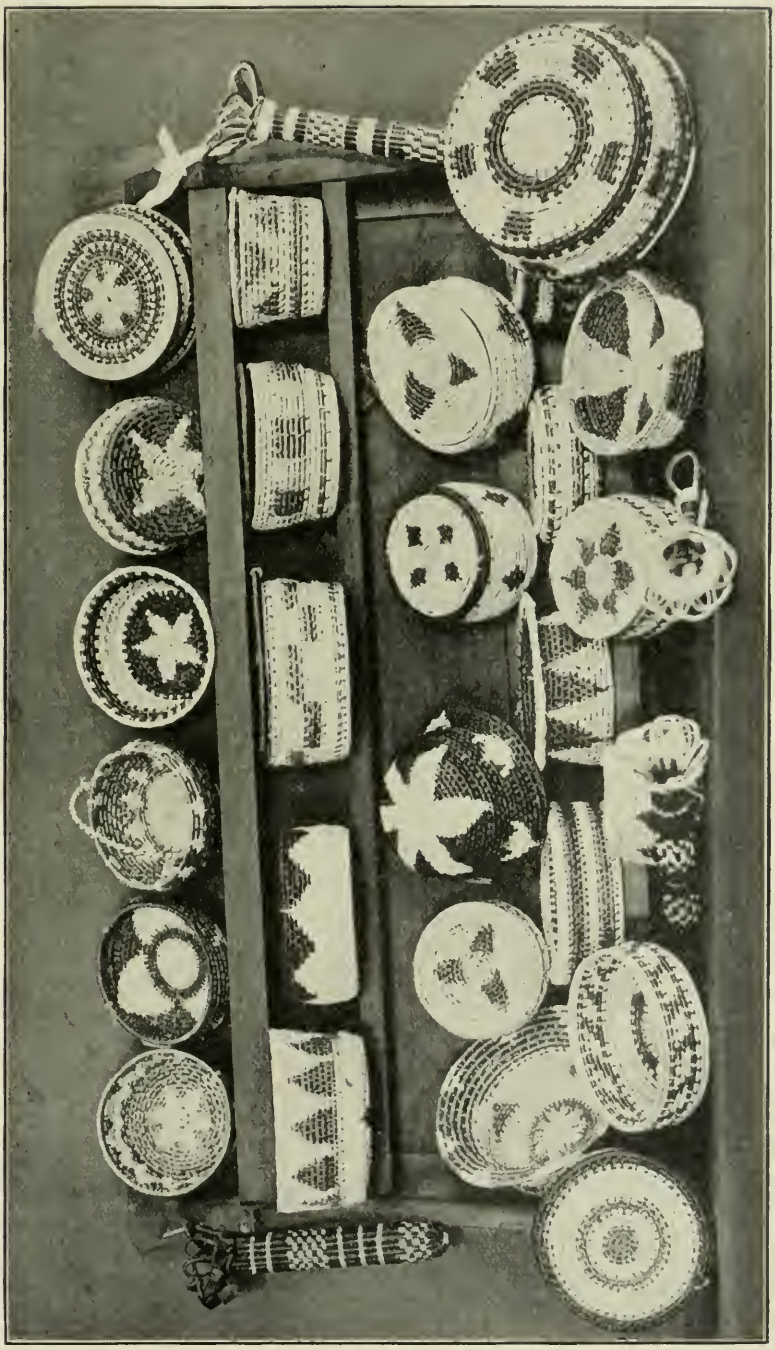
Basketry. Ottawa Normal School.



Basketry, Ottawa Normal School.



Basketry, Normal School, Ottawa.



Indian Baskets, Toronto Normal Students.

the child appears to have a wonderful stimulating effect. One half day of each month is set apart as Visitors' Day. On these occasions the ambition of the teacher as well as that of her class is to make a creditable showing. I understand the colours are supplied by the Board. Some Constructive Work has been taken up in the Kenora Schools where a fair degree of perfection was attained. Clay Modelling has practically been untouched in our schools. In the other town and village schools a little attention has been paid to Art. In most of the rural schools little has been done in these lines."

Mr. W. H. Ballard (Hamilton) "In Art the extent of the work being done is very satisfactory and in nearly all the grades is in most respects up to the requirements of the regulations.

"As to the character of the work the results are equally satisfactory, the more especially as in classes where for any reason the full limit could not be overtaken more regard was paid to thoroughness than to the quantity of work attempted.

"In Form 1 the limit required has been very fully overtaken with satisfactory results both as to the character and extent of the work.

"In Form 2 nearly the same as in Form 1 except that the requirements in water colour have not been fully met.

"In Form 3 an earnest effort is put forth to meet the requirements of the regulations. Difficulty is, however, met in the fact that pupils have not yet reached this grade who have fully or nearly covered the work prescribed in the grades below. This difficulty will shortly disappear and the full limit be covered.

"In Form 4 for the reason given above the full work laid down for the grade cannot be accomplished. Earnest and thorough work of a somewhat more elementary character is however done in all the classes.

"In Form 1 Constructive Work has been fully taken up with the exception of basket and raffia work. Clay Modelling has been carried on in many of the classes.

"In Form 2 nearly all the classes are carrying on the Constructive Work more or less effectively, but so far the full limit has not been covered by any class. Basket and raffia work will be taken up early in the New Year. Clay Modelling is done in some of the classes.

"In Form 3 fully two thirds of the classes have made a creditable beginning. In one or two of the classes the following work has been done. Geometric designs to measurement for borders, patterns, etc., cardboard and paper construction, book covers made and ornamented, Union Jack drawn to proper measurement and coloured. Designs in wall paper, oil cloth patterns, squares, oblongs, triangles, circles and cones were drawn and cut out of cardboard. Preparations have already been made in some of the schools for taking up raffia work.

"In Form 4 similar work to that mentioned under Form 3 has been taken up in half the classes and the boys have since September last taken Manual Training at the Collegiate Institute.

"Preparations are under way to establish two additional centres in Manual Training. These together with the accommodation given at the Collegiate Institute will furnish opportunities for Manual Training to practically all the boys in Forms 4 and 5.

"Needlework is taken up in Forms 1, 2, and 3, and the required limit is fully covered as the following distribution of the work will show.

"Form 1. Running stitch, basting, backstitching, blanket stitch. Mat, napkin ring, needlebook with wool on burlap canvas. The pupils are then taught to measure and use ruler in the making of simple conventional designs,

first on paper and then on cotton, the design being worked with stitches of coarse coloured cotton thread. Make penwiper, sew on button. Talk on wool.

"Form 2. Talk on cloth, its manufacture, small piece woven on card, Overhanding, overcasting and plain hemming. Talk on cotton. Making towel, bag, sunbonnet.

"Form 3. Two runs and a backstitch, damask hem, hem stitching, herring bone, feather stitch, overhand patch, gingham apron, dust cap, table napkin, pillow case, button hole stitch, hemmed patch, lawn apron, flannel patch, blind loops, button holes, child's underwaist and skirt. Talk on linen."

Mr. T. A. Craig (Grenville County) writes:

" I regret that I cannot report very favorably regarding the character and extent of the work being done in Art, Constructive Work and Needlework in the schools, in this Inspectorate. One great difficulty, is the lack of qualification on the part of the teachers to do the work satisfactorily. Another is inability to adjust the daily programme of work so as to give these subjects due attention without neglecting other subjects which are considered of far more practical value in everyday life. And, still another, is parental opposition and a consequent refusal to provide the children with proper material with which to work. The enthusiastic teacher, with the proper conception of the educative value of the work, and ability to use it as a means of developing and enlarging life, can, of course, overcome these difficulties, but, such teachers are scarce, and, until we have them, I fear it will be difficult to get due attention given to this department of our school programme.

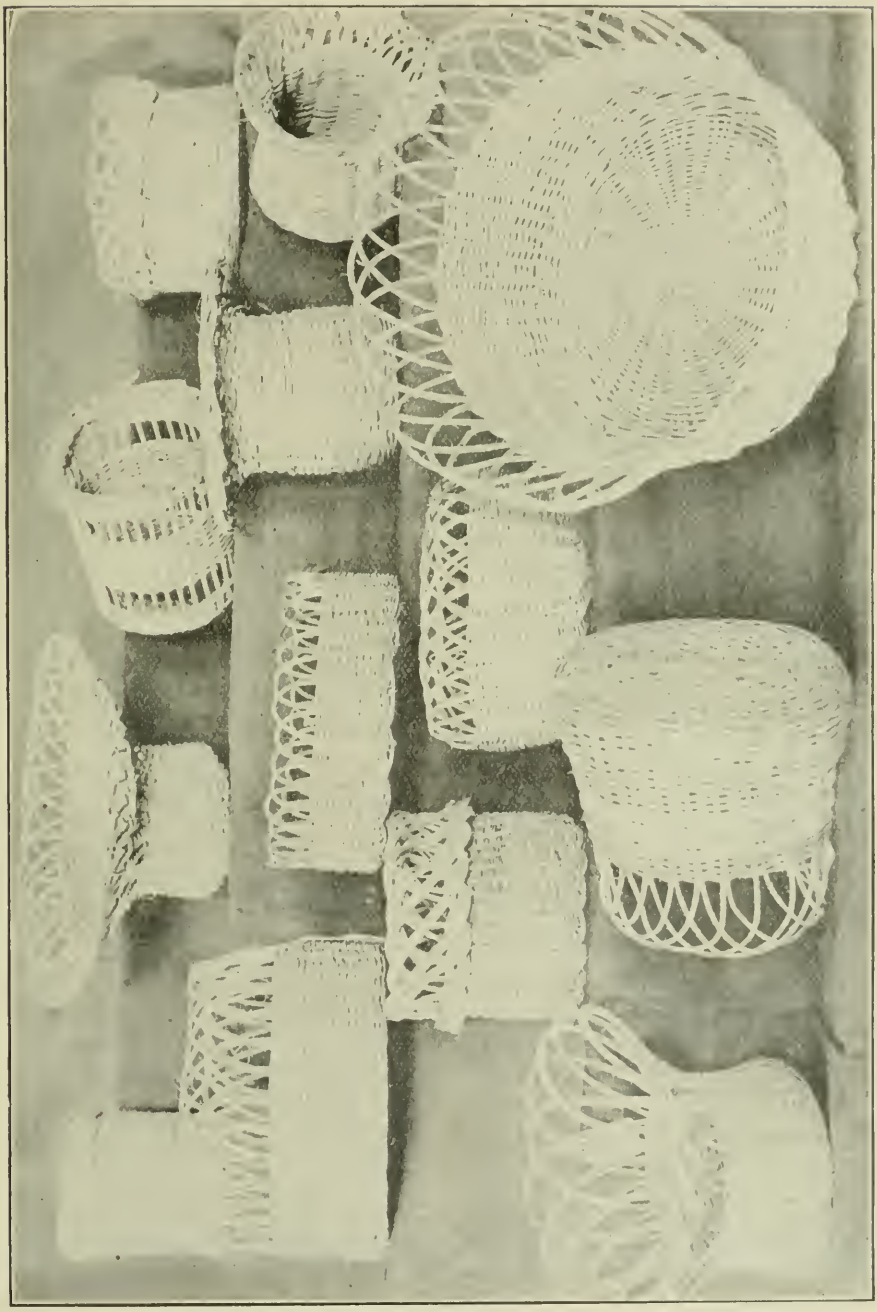
"Teachers in the rural schools say, that there are so many subjects on the programme of studies, that it is impossible to give proper attention to them all, owing to the number of classes they have, and that it becomes a question with them what part of the work it is advisable to pass over lightly, or, in other words, to practically neglect.

"Parents demand that their children be taught reading, writing, spelling, arithmetic and language, and, that they become proficient in these subjects. Our teachers must, of course, honor this demand, and, construct their time-tables as far as possible in accordance with it.

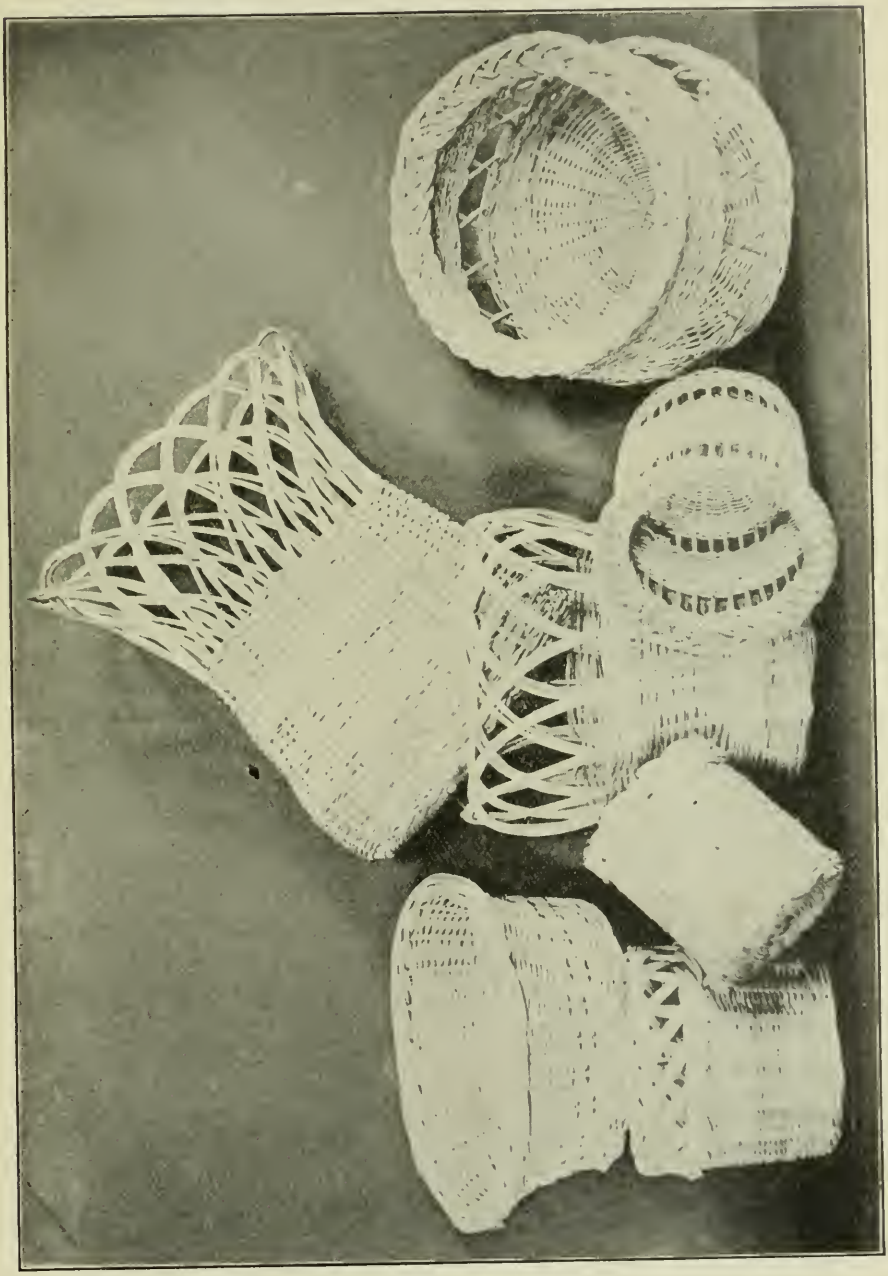
"The foregoing remarks apply more particularly to the rural schools. In the urban schools fair attention is given to these subjects, and the work done, particularly in drawing, is very good In these schools each teacher has charge of not more than two classes, so that there is little difficulty in finding time to give each subject on the programme the necessary attention. Better equipment for doing the work is a necessity in these schools also.

"While I cannot report that I am at all satisfied with the work being done in these subjects, owing, as I have already indicated, to the inability of the teachers to use them as an educative means, I feel that we are making progress towards giving them a permanent place on the programme of studies in our public schools, and that as soon as we have a supply of teachers competent to handle them they will become the most attractive subjects in our school work."

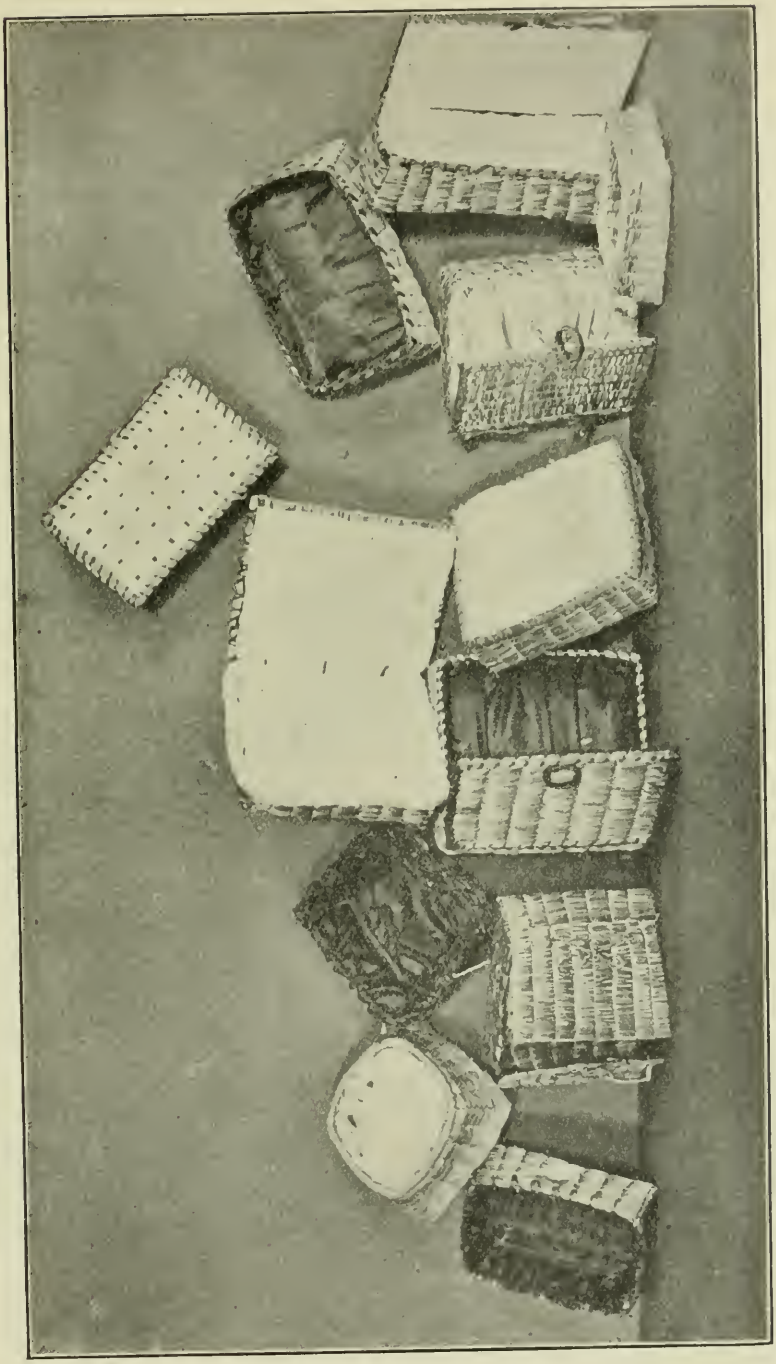
Mr. H. H. Burgess (County of Grey) writes: "I have to say that in the Town of Owen Sound there is a Kindergarten Department in each of the three Public Schools and as a consequence paper folding is continued to some extent till the end of the third book classes. This year the boys in the fourth book classes have had the advantage of one lesson a week in the Manual Training Department of the Collegiate Institute. The girls have had Household Science; Art Work and Colour Work has been given considerable



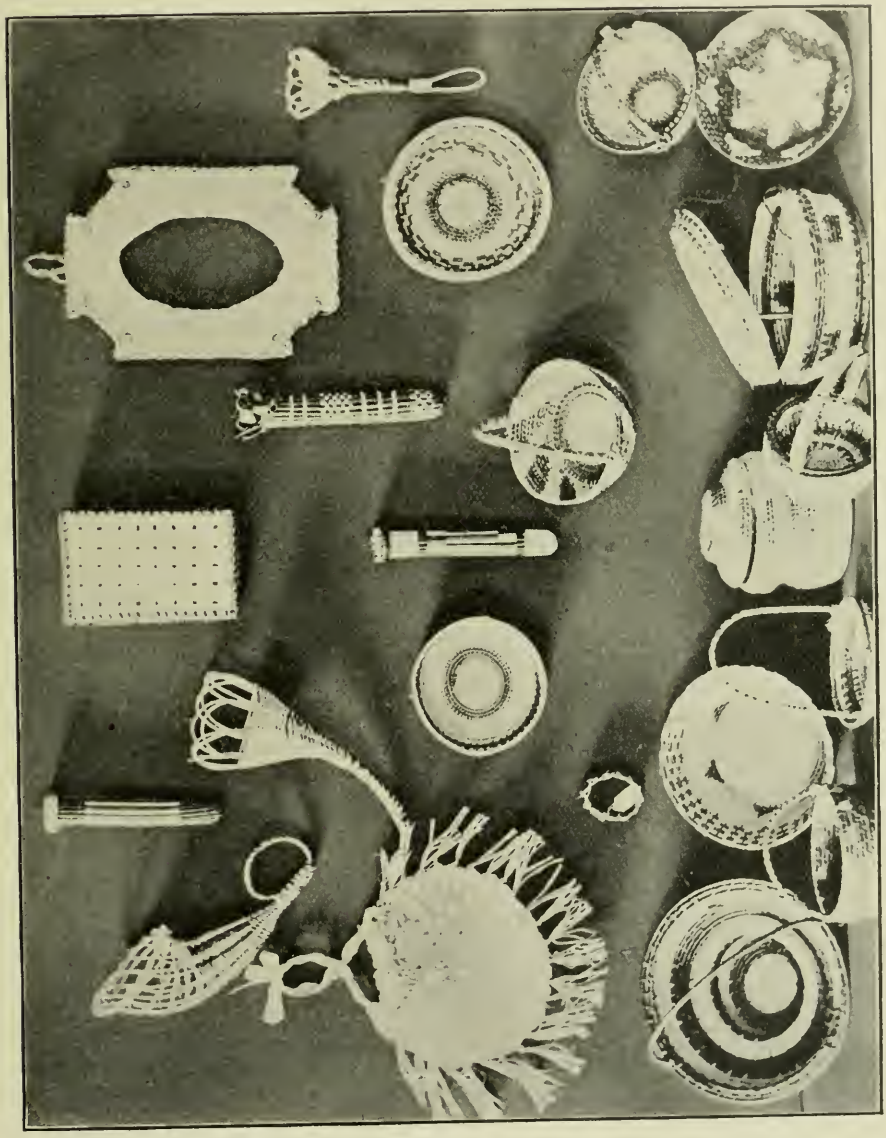
Wicker Baskets, Toronto Normal School.



Wicker Baskets, Toronto Normal School.



Lined Sweet Grass Baskets, Toronto Normal School.



Reed and Raffia Work, Toronto Normal School.

attention. The character of the work seems reasonably satisfactory. One of the regular teachers has taken a six months course in painting, and sketching and she has been a great help to the other members of the staff. This fall Miss Semple, Supervisor of Drawing in the Toronto Public Schools, gave a full half day at practical work with the teachers of Owen Sound. In the Rural Schools not so much has been done. Few of the teachers have had the necessary training, but the course in the 'Canadian Teacher' has been followed in the school room by the majority of the teachers as far as time and circumstances would permit. The pupils take great satisfaction in this, as they see, handle and show something made by themselves. Then again the pupils are compelled to work accurately. In only two schools has anything been done in woodwork of any kind. One of the teachers has been quite successful and has quite a display of work. In the Rural Schools this work has to be introduced very discreetly as the three R's must not be crowded to the wall,"

Rev. Thos. McKee, B.A. (Simcoe County), writes: "In my inspectorate there are 120 schools. In all of these Art and Constructive Work are taught as outlined in the regulations. In some of the schools these branches are well taught, in some fairly well, in some not so well, and in the remainder very indifferently. I have graded the schools as below:

"22 graded one—the highest. 37 graded two—second grade. 31 graded three—third grade. 30 graded four—fourth grade.

"The work of the needle is taught to the first, second and third forms in only eleven of my schools up to the present time but I hope for expansion in this direction in the near future."

Mr. W. Irwin (Stratford) writes: "In the Urban Schools Art and Constructive work are carried on along the lines indicated in the curriculum. In the Rural Schools not much Constructive Work has been done yet, but the course in Art work is pretty fully carried out.

"Nothing is being done in Needlework in either Urban or Rural Schools in this inspectorate."

Mr. J. Elgin Tom (West Huron), writes:

"The work done in the schools of West Huron, in Art, Constructive Work and Needle Work is not so satisfactory as it should be, or as I desire to have it. There are several reasons why this work is not up to the standard, especially in the rural schools.

"The frequent change of teachers, their inexperience, and the teachers not knowing the work themselves make it impossible to get satisfactory work in these, as well as the other subjects of the curriculum. Of the 108 teachers in the rural schools of West Huron, 66 have taught less than three years, and 59 of the 108 have been less than one year in their present positions. At least 50 per cent. of the rural schools have changed teachers each year since 1900.

"Art, Constructive Work and Needle Work not being subjects for examination for either teachers or pupils, the teachers do not know the work well enough to teach it, and the pupils are not sufficiently interested in the work to do it well.

"The scarcity of labour forces parents to keep their children at home to help with the work much more than in former years, hence the small and irregular attendance in most of our rural and village schools.

"A majority of the parents and teachers believe that the other subjects of the course of study are more important than Art, Constructive Work and Needlework, therefore they put little time on the teaching of these. There is not sufficient time to teach all the subjects of the Course of Study in an

ungraded school. Pencil sketches of common objects such as plants, flowers, fruits, leaves, animals, etc., are taken in all the schools and are frequently well done.

"Colour work is taught in about half the schools. Most of these use coloured crayons and the others water colours. They find the crayons cleaner and more convenient than the water colours. A few of the schools are doing work in paper cutting and folding, also in the construction of boxes, baskets, tables, chairs, etc., with plain and coloured paper. Very little is being done in clay modelling. A few of the teachers give instruction in Needlework. The sewing done by some of the pupils is quite creditable.

"The want of suitable Manuals on these subjects at a moderate price has hindered this work. Most of the teachers would teach Constructive Work and soon become familiar with it, if a proper Manual were prepared for their guidance."

Mr. J. H. Knight (County of Victoria) writes: "But little progress has been made in the Departments named by you, chiefly owing to the fact that drawing has been struck out of the list of subjects to be taken at the Entrance Examination. It is found that if a subject is to be reported on by the teacher the pupils consider how little will secure a pass, rather than how much they can possibly learn. At our Convention in May last, Miss Semple, of Toronto attended and gave interesting addresses which were highly appreciated by the teachers. In some cases the pupils have been the gainers, but not to the extent I could have wished."

Mr. L. A. Green, B.A. (Algoma), writes: "Many of our schools are conforming to the regulations in the matter of pencil, crayon and water colour work and a few are doing simple constructive work and a few take up needlework occasionally. We find it difficult to conform exactly to the requirements because it is impossible to secure teachers carefully trained in these subjects. We do not attempt any clay modelling."

Mr. D. Chenay (North Essex), writes: "I regret to say that the Art Course for Public Schools has not received its due share of attention throughout the schools in this inspectorate.

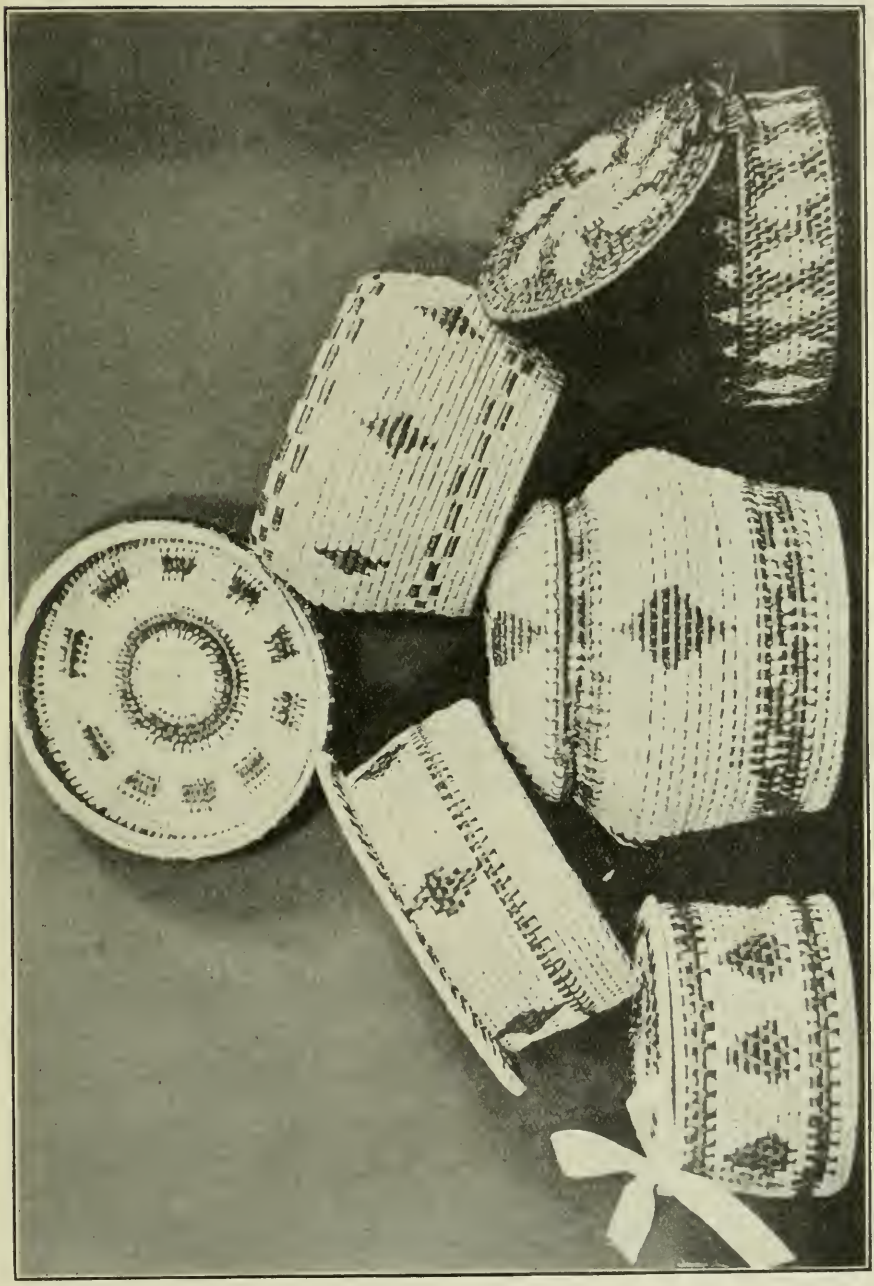
"In only about a dozen schools has needlework, basketry or raffia work been done, nor has the interest kept up or increased very much.

"All the schools, however, do work in water colours or coloured crayons, also pencil work and construction work of simple common objects with occasional attempts at picturing stories and occurrences real or imaginary.

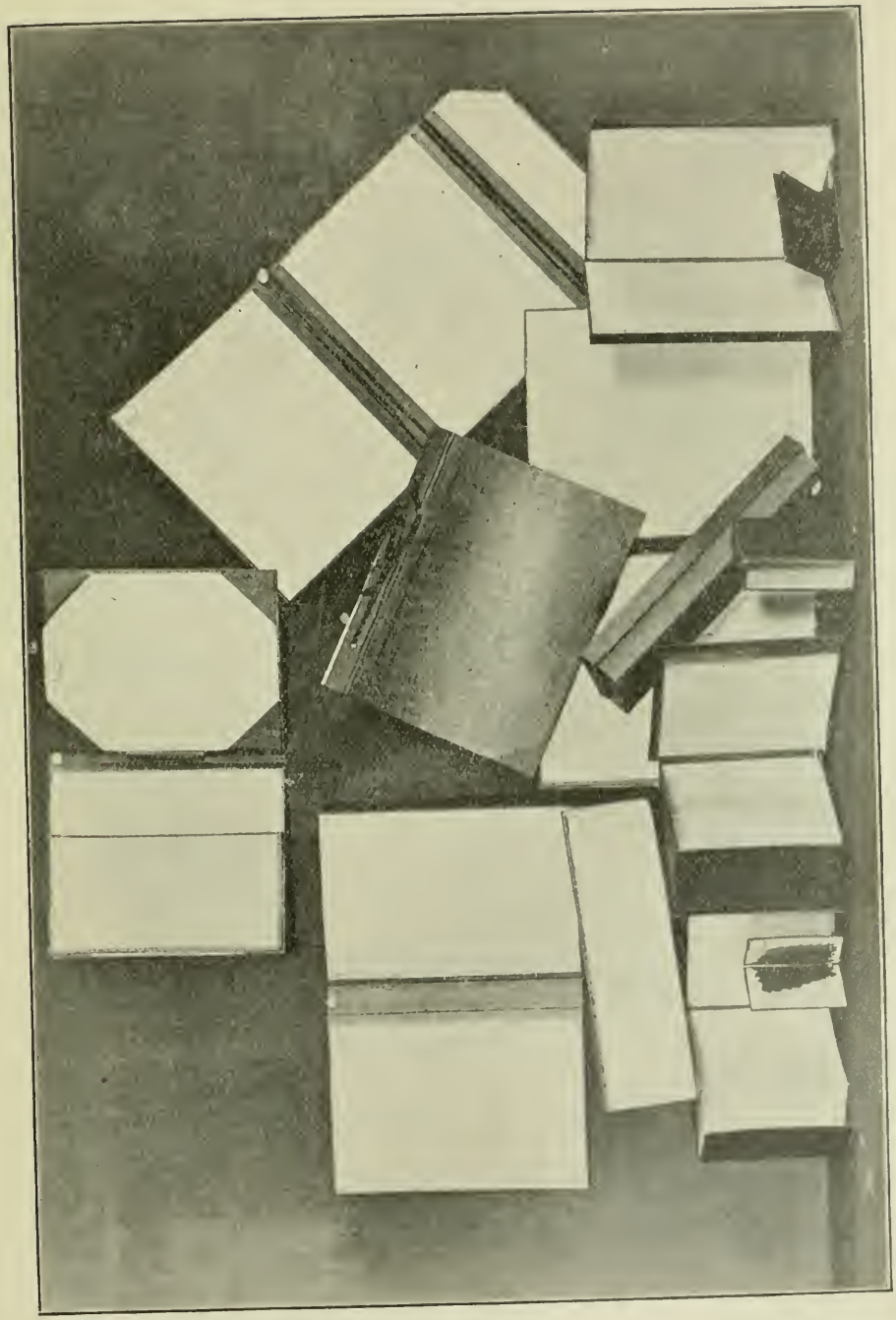
"This work is done best in our larger village and town schools. In a large number of the rural schools where the attendance is not so regular—the younger children usually attending during the summer and the larger during the winter, the work has not taken so favourably neither with the pupils nor the parents.

"I should be pleased to give you a more satisfactory report but I must confine myself to the actual facts."

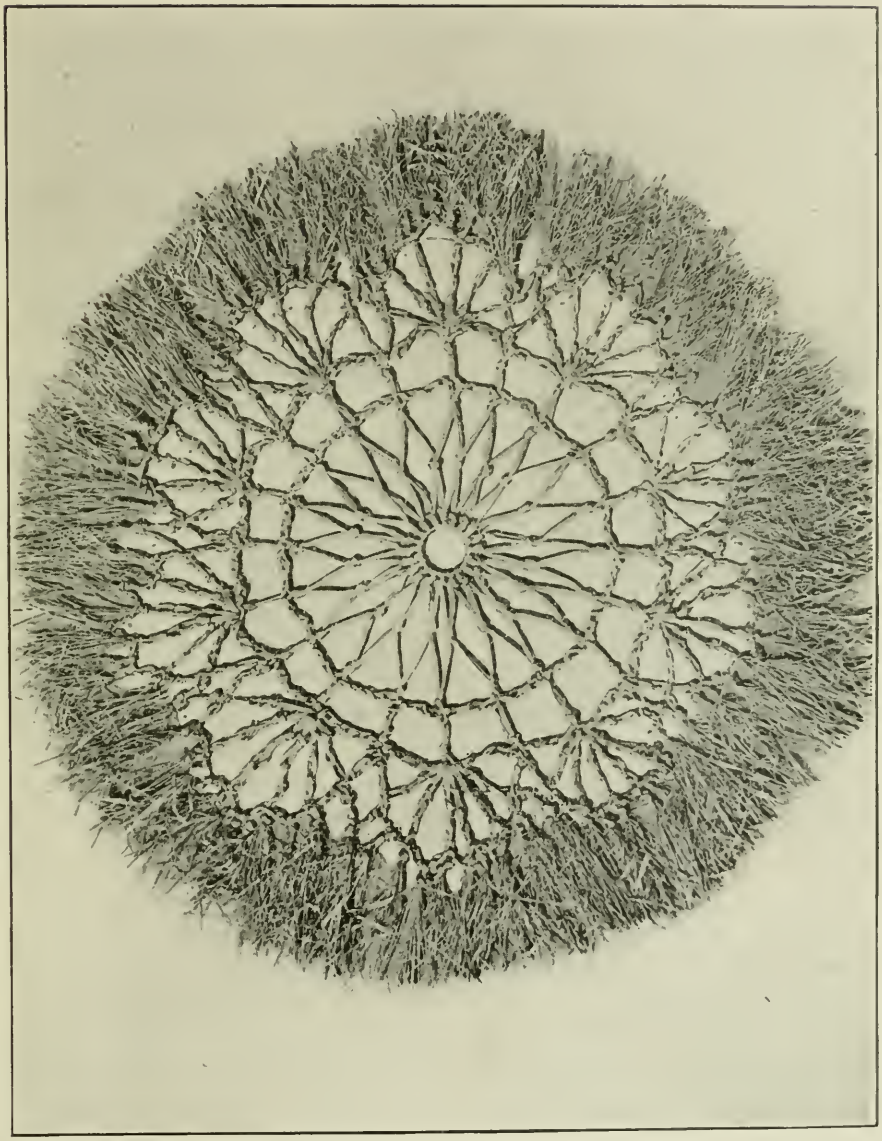
Mr. N. Gordon (County of Dufferin) writes: "Art is taught in most of our schools and in some of them with a fair amount of proficiency. Construction Work in a number, but not so generally as Art. I am not aware that Needlework has as yet been taken up in any. The work in Art is very creditable in a few cases where the teacher has taken an interest, but the teachers in many schools seem to be at a loss since they have had no proper instruction themselves, and perhaps not supplied with proper material. However, there has been improvement in these subjects during the past few years since the Regulations require them to be taught and the teachers are getting their instruction during their professional course to enable them to do it efficiently. My impression is that these branches will be in a few years taught with the



Indian Baskets, Toronto Normal School.



Folios made by Students, Toronto Normal School.



Raffia Mat Made by Student of Toronto Normal School.

same efficiency as the other subjects on the school programme. If we had an examination in these the same as other branches at the Entrance Examination we would soon have the necessary improvement. My experience is that any branch in which there is no public examination is more or less neglected in order to have more time for those in which an examination is required."

Mr. T. W. Standing, B.A. (Brantford) writes: "I would say that in the rural schools under my jurisdiction there has been little, if any, attempt to give systematic instruction in Needlework. A number of teachers have given lessons in cardboard construction, but in most cases no definite series of lessons has been planned nor any course of work pursued systematically. In Art more has been done but teachers have not yet mastered the course of work outlined in the Regulations, and consequently much of what is done is somewhat hap-hazard in its character. The fact is we have so many immature teachers and teachers who have had little or no training in these subjects, that there is absolute need of a teacher's handbook covering a pretty definitely marked out course of work in each of these departments of school work."

Rev. Geo. Grant, B.A. (Parry Sound District) writes: "The work in Forms one, two, and three is fairly well covered in all the better class of schools throughout my inspectorate. In the small and poor schools where the average attendance does not exceed eight or ten pupils very little work of this character is attempted. We think it better that the whole time of teacher and pupils be devoted to the essentials of Public School work—reading, spelling, writing and arithmetic. No attempt has yet been made as far as I am aware to do anything at Clay Modelling or Needlework in any of our schools."

Mr. J. S. Deacon (Halton County) writes: "Nothing is done in Needlework. There is comparatively little done in Art and Constructive Work in the rural schools. About ten per cent. of the teachers in ungraded schools assign, teach and supervise this work, the majority claim that they are unable to find time for it. The urban schools manifest a lively interest in these subjects and have done very creditable work in pen and ink, water colour, crayon and charcoal. Some schools have coarse grey paper filling space for three feet above the wainscotting and this is used to fasten the best work of the pupils thereto and keep it on exhibition for ornamentation and encouragement. Four of our teachers have taken short courses at the Macdonald Institute. These are helping their associates in the graded schools, and at our County Institute, to take up the work more intelligently and on a larger scale."

The conclusion, that a number of the Public School Inspectors do not consider these subjects of sufficient importance to warrant their interest and attention has to be formed when one considers the fact that not nearly fifty per cent. replied to the circular sent. This is to be regretted and it is a condition of things that only time and experience can alter. In the letter of Mr. Craig quoted above occur the words "while I cannot report that I am at all satisfied with the work being done in these subjects, owing as I have already indicated to the inability of the teachers to use them as an educational means, I feel that we are making progress towards giving them a permanent place on the programme of studies in our Public Schools and that as soon as we have a supply of teachers competent to handle them they will become the most attractive subjects in our school work."

Every Inspector who encourages his teachers to give this work a fair trial will reach the same conclusion. This can be done without at all lessening the efficiency of the other subjects, as, properly taught, these branches intensify and deepen what is looked upon as the purely intellectual side of the school.

The main difficulties pointed out by the various Inspectors are as follows:

1. Inability of the teachers to deal with these subjects.

2. Absence of definite courses and suitable text books.

3. Disinclination of School Boards to provide necessary material and equipment.

1. This difficulty will gradually disappear, at least in all schools that employ Normal Trained teachers. Now that the work in the Normal Schools is being restricted to those branches which can be taught in every class room, no teacher will leave those institutions without being able to give adequate instruction in paper work, cardboard construction, and clay modelling at the slightest possible expense and in such a way as will help and not hinder every other subject in the curriculum. With reference to those School Boards not employing Normal Trained teachers much might be done by holiday courses and greater attention being given to the practical consideration of these subjects at the various Institute meetings held throughout the Province. By "practical" is meant specimen lessons being given to a class of pupils, talks on methods of teaching, use of material, adaptation of waste material, how and where to procure material, simple equipment, etc. There is scarcely a district that has not within its limits one or more teachers who have had some training and are doing useful solid work. These should be public spirited enough to place their experience at the disposal of their less fortunate fellows. Every Manual Training and Household Science teacher in the Province should endeavour to make their particular schools centres for the surrounding district by establishing Saturday Morning or Evening Classes for the instruction of teachers living in the neighbourhood. The Department might well give a small grant to those doing this kind of work. Amongst the teachers who have adequate knowledge of these subjects there is too much of a tendency to regard their accomplishment as a "trade secret" to be jealously guarded and never on any account allowed to escape for the use of their fellow teachers.

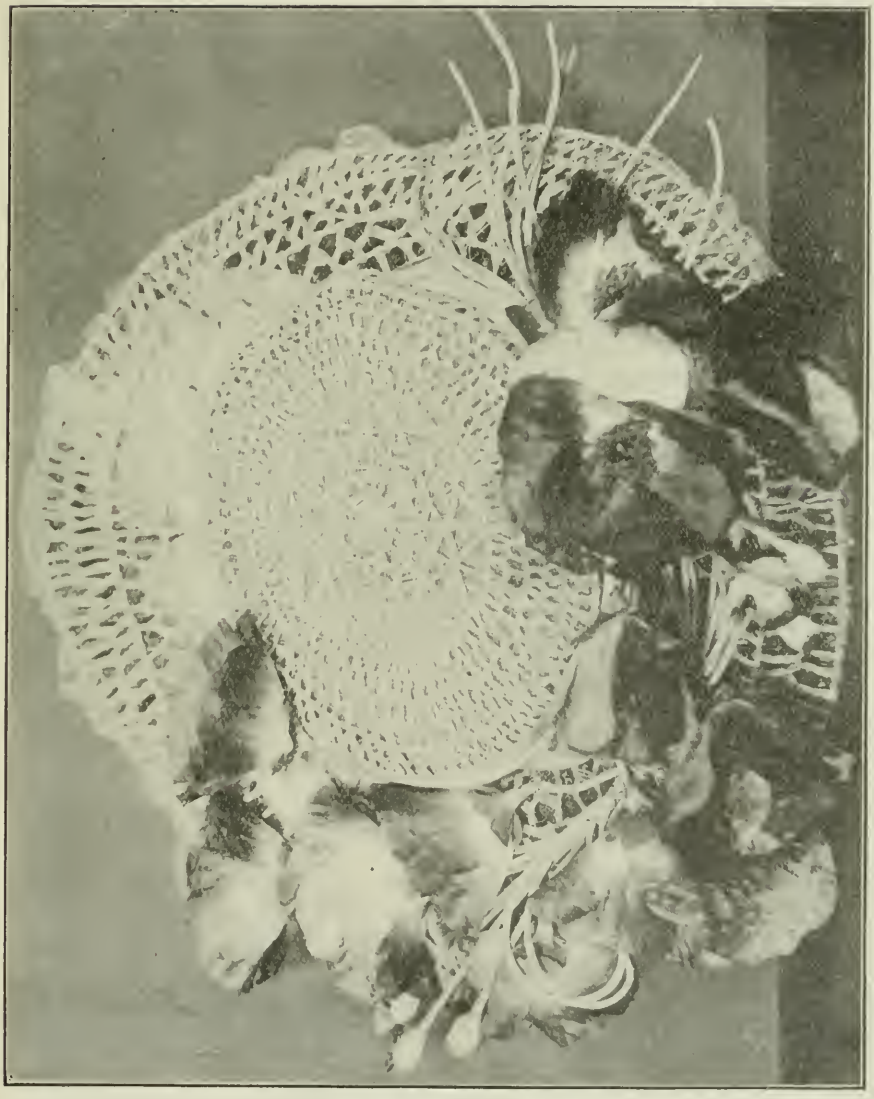
2. This obstacle would be entirely removed by the adoption of means suggested in the last report:

(*a*) The issue of Bulletins by the Department.

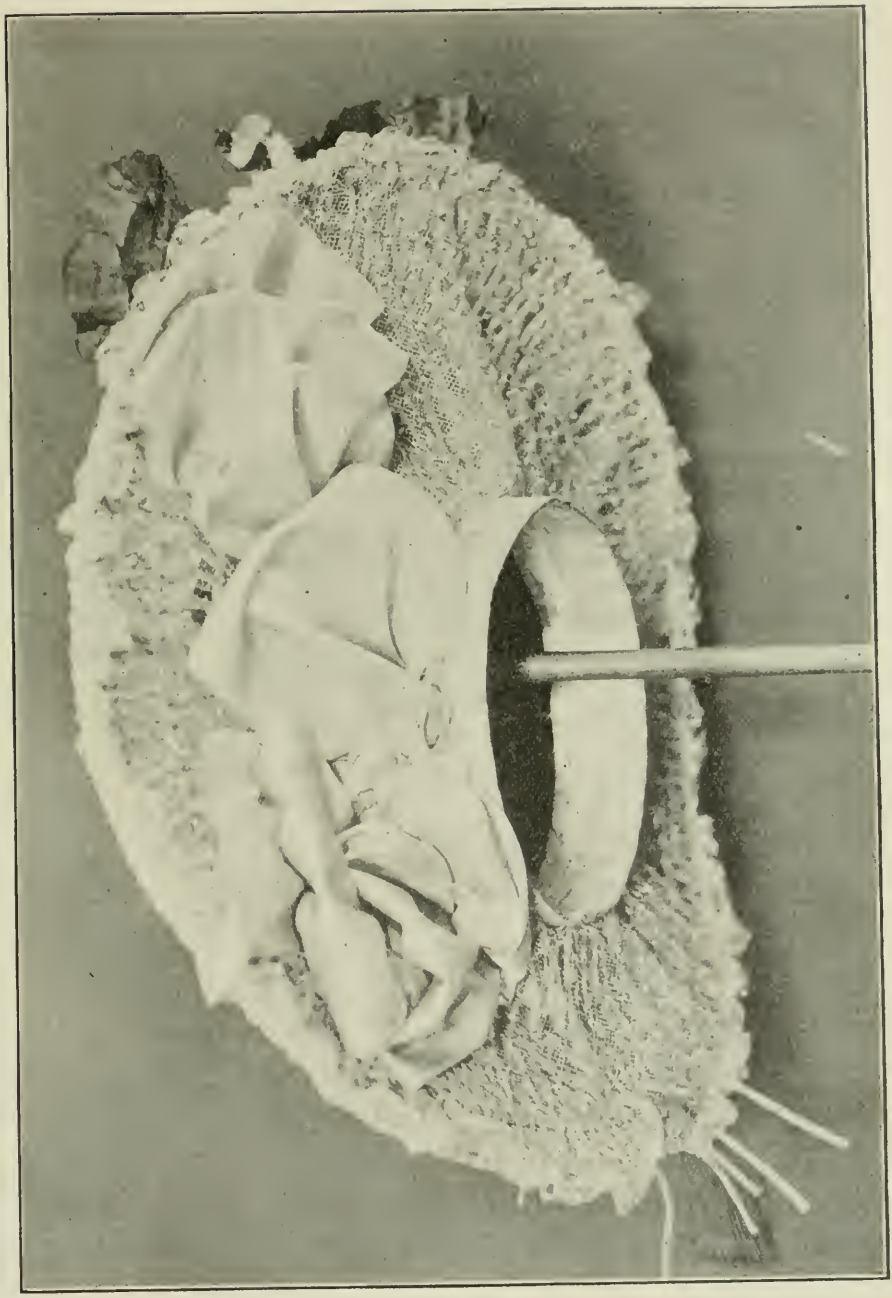
(*b*) The establishment of small circulating libraries containing a number of the best books on these subjects accompanied by a brief explanatory pamphlet.

Many states, cities and towns in the United States issue Bulletins of this description. These are well illustrated by drawings and sketches so that even the untrained and inexperienced teacher has little difficulty in giving educational and practical instruction. Two of the illustrations given show pages from one of the bulletins referred to. The libraries spoken of might be placed in the hands of the Secretaries of the various Teachers' Institutes, circulated amongst the members, discussed at the Institute meetings and then passed on to the next association to undergo the same process. The Departmental Library in Toronto contains a number of the best books on these subjects. Duplicate copies of these might be provided and loaned to teachers in various parts of the Province.

3. Whenever Trustees see this kind of work effectively done their disinclination to provide the material and the small equipment necessary, generally disappears. Where this disinclination exists a teacher who knows her business can do much to remove it. I quote from the last report: "It is not always the teacher with the most elaborate equipment and the most generous supply of material that accomplishes the best work. The art of makeshift is a useful study and the resourceful teacher who is constantly on the look out for ways and means and material is rarely at a loss. One



Hat Made and Trimmed by Student of Toronto Normal School.



Hat Made and Trimmed by Student of Toronto Normal School.

who found it difficult to obtain just what she required begged a number of wall paper sample books and from these her pupils made an excellent series of instructive and useful objects. Another did the same from the covers of old copy and exercise books. These instances which could be multiplied, are simply mentioned to show that inability to obtain the usual material employed need be no barrier to the introduction of constructive work." Several inspectors refer to a custom that holds in their inspectorates—that of school exhibitions or visitors' day. By these means parents and Trustees are brought more directly in close contact with the work of the school and all opposition to this work ceases, especially where it is judiciously taken and not allowed to absorb an undue proportion of time, as has been the case in one or two localities owing to the great enthusiasm of the teacher.

The aim of work of this character may be considered as threefold:

1. To exercise that motor activity which is now universally recognized as an essential factor in the education of the child.

This psychological aspect of the case has been admirably dealt with by Dr. T. M. Balliet, late Superintendent of Schools, Springfield, Mass., now Dean of the School of Pedagogy, New York. In an eloquent address on "The Educational Value of Manual Training," he thus deals with the function of hand work in brain development. "The schools have it in their power, in effect, to furnish brains to pupils, if they develop into functional activity, cells which otherwise would have lain forever dormant. . . . .

"The cells of the brain which we need specially to consider in connection with Manual Training are of two classes, sensory and motor. The sensory cells receive the different impulses which come from the special senses, and those which come from the skin and internal organs of the body, the motor cells generate the nerve energy which cause the muscles to contract—Nerve cells grow and develop like any other part of the body—through nutrition and functional activity. The visual cells develop through seeing, the auditory cells through hearing and so on with the rest. The visual area in persons born blind or blinded in early life remains in a rudimentary condition through life. . . . The exercise of the special sense is necessary for the proper physical growth of the brain. It also follows that sense training, in so far as it is a physical process at all, consists not in training the external sense organs, but in developing their brain centres.

"Like the sensory cells, the motor cells develop through exercise. It is the function of these cells to generate nerve energy to contract the muscles, and thus to produce and to co-ordinate muscular movements. Voluntary muscular movements have therefore the effect, not only of exercising the muscles involved, but also of calling into activity the motor brain cells which control them. Indeed, these motor cells cannot be made to act and develop, except by means of the muscles, and muscular exercise, whether in the way of ordinary labour, of recreation, of gymnastics, or of manual training, is absolutely indispensable to the proper development of the motor area of the brain. Moreover, this exercise of the motor cells must come during the period of brain growth, if it is to be most effective, and the lack of such exercise during this period is a matter of very serious consequence to the brain. Physical energy implies a good motor brain area. The man of energy must be a man of brains no less really than the man of thought, and physical laziness implies a deficiency in the motor part of the brain . . . Now it might be argued that manual training is not necessary for the development of the motor centres of the brain on the ground that gymnastics and out-door exercises are quite adequate to accomplish it. The answer to this objection is the fact that gymnastics and outdoor physical exercise in general appeal almost exclusively to the fundamental muscles and their brain centres, and rarely to

the accessories. Nothing short of manual training will reach effectively the important brain cells governing the fine motor adjustments of the muscles of the hand. . . . The inner surfaces of the joints, the muscles and ligaments are supplied with sensory nerves, which conduct to the brain sensations of movement, which form the basis of direct motor perception, just as sensations of light and sound form the basis of the perception of colour and tone. These motor percepts are developed into motor ideas, which, like ideas of light and tone, enter into the higher thought products, and becomes a part of the warp and woof of the mind's organized body of knowledge—the only kind of knowledge which is power.

"Motor ideas are developed by all forms of muscular movement with any part of the body, by ordinary work, by play, by gymnastics, and by manual training. All these, are therefore, means of motor training. But the motor area of the brain, governing the infinitely varied and complex movements of the hand, show that this organ is by far the richest source of motor ideas, and especially that portion of it little appealed to in either gymnastics or in ordinary skilled labour, namely the five fingers and their many sensitive muscles and joints. The hand is therefore a special sense organ, somewhat like the eye and the ear, and an untrained hand is in many respects as unfortunate a limitation as an untrained eye or an untrained ear."

2. The development of "industrial intelligence."

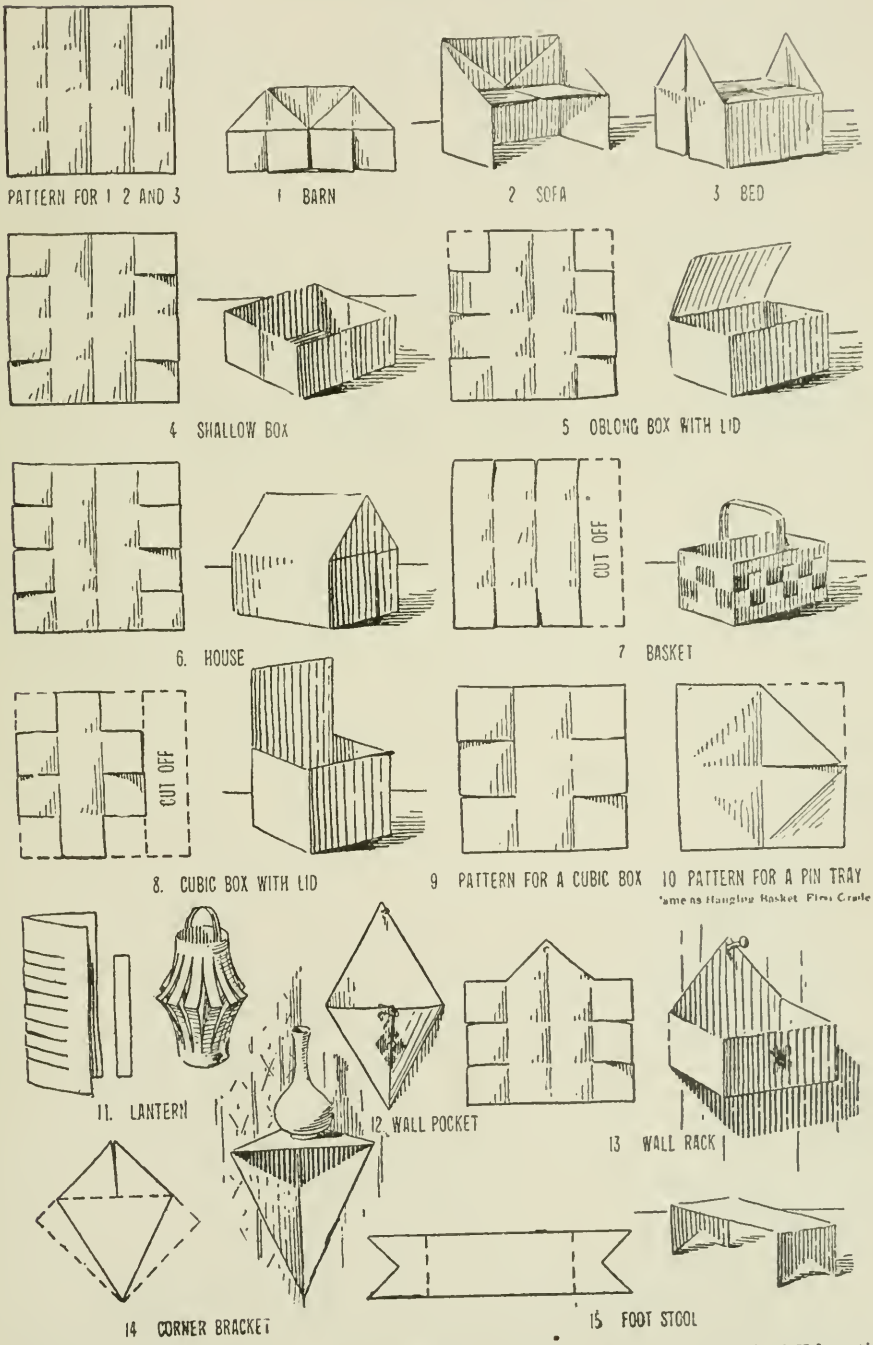
One of the most important recent Commissions on Technical Education was that ordered by the Governor of the State of Massachusetts. In the report issued by that Commission the term "Industrial Intelligence" is defined as follows: "mental power to see beyond the task which occupies the hands for the moment, to the operations which have preceded and to those which will follow it,—power to take in the whole process, knowledge of materials, ideas of cost, ideas of organization, business sense and a conscience which recognizes obligations. Such intelligence is always discontented, not with its conditions, but with its own limitations, and is wise enough to see that the more it has to give the more it will receive." This "Industrial Intelligence" is a prime necessity to any country, but particularly to a country like our own that is seeking to build up its manufactures and to acquire and maintain a prominent position in the markets of the world.

3. Development of appreciation of beauty in constructed objects.

This appreciation is very largely developed by choosing between forms of different shape, size, colouring, etc. One may hear much talk about wall papers, colour schemes, draperies, etc., but until he is required to choose some definite design to fulfil certain conditions, his appreciation is not fully aroused. Some may doubt that this faculty needs to be cultivated. Take a walk through any ordinary furniture store and what do you see?—gaudy stuffed furniture, gilded chairs, brass and onyx tables, both loaded with jumbles of twistings, turnings, carvings, and all sorts of contortions that have no structural relation to the object, ugly mouldings, gaudy carpets and hideous wall papers. The merchant buys them because the average customer requires the most ugly, ornate and costly looking stuff he or she can afford to buy. The rich woman buys the furniture that is most plastered with carving because it shows that she can afford it and the poor woman goes as far as she can in the same direction because she wishes to make a good showing among her friends. The appreciation of simple beauty, shape, and form unspoiled by plastered ornamentation, the delicate harmony of quiet colours and the delicious restfulness of simplicity needs to be cultivated to-day more than ever, and as wealth grows this need will not grow less. Art and constructive work, and a teacher who understands the fundamental

PLATE VIII.

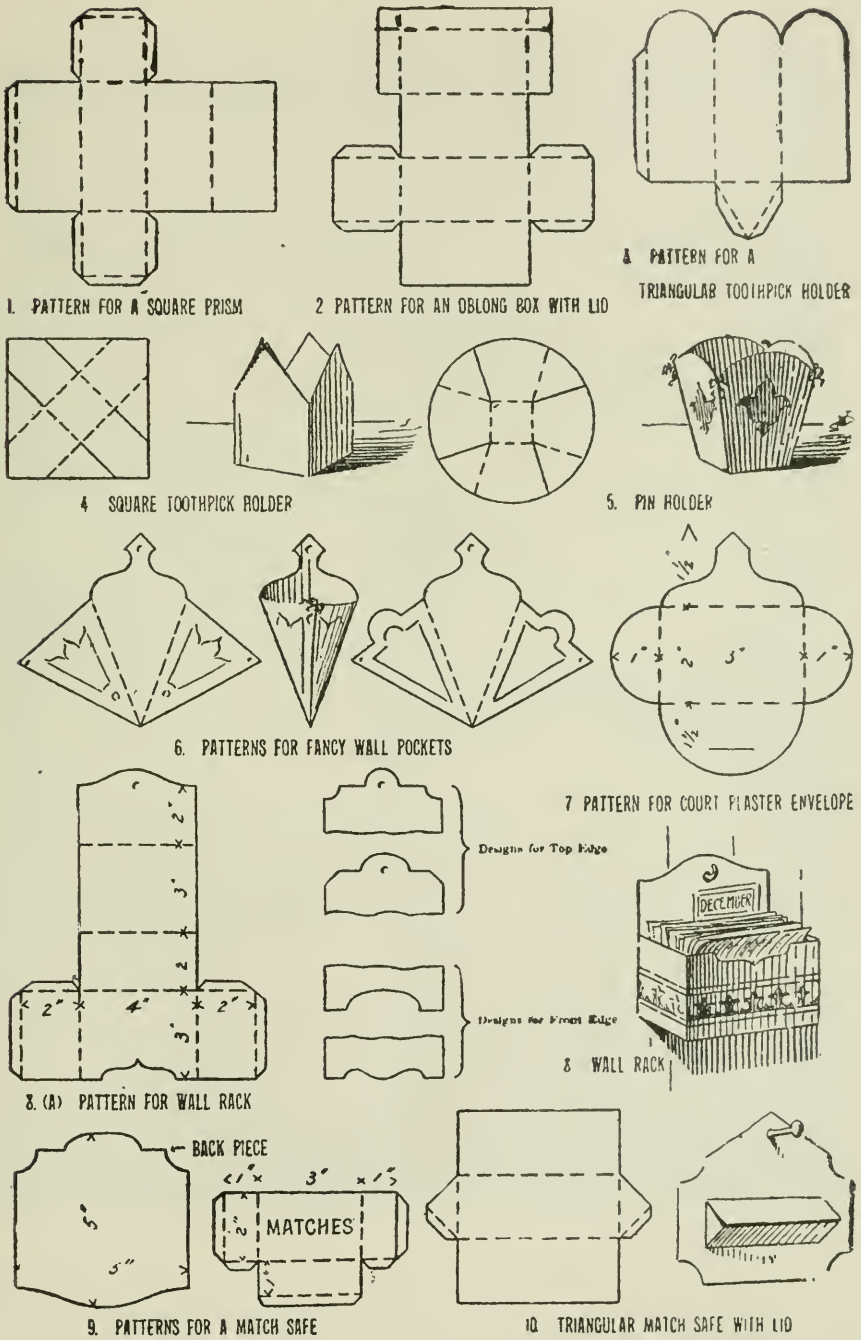
SUGGESTIONS FOR CONSTRUCTIVE WORK FOR SECOND GRADE



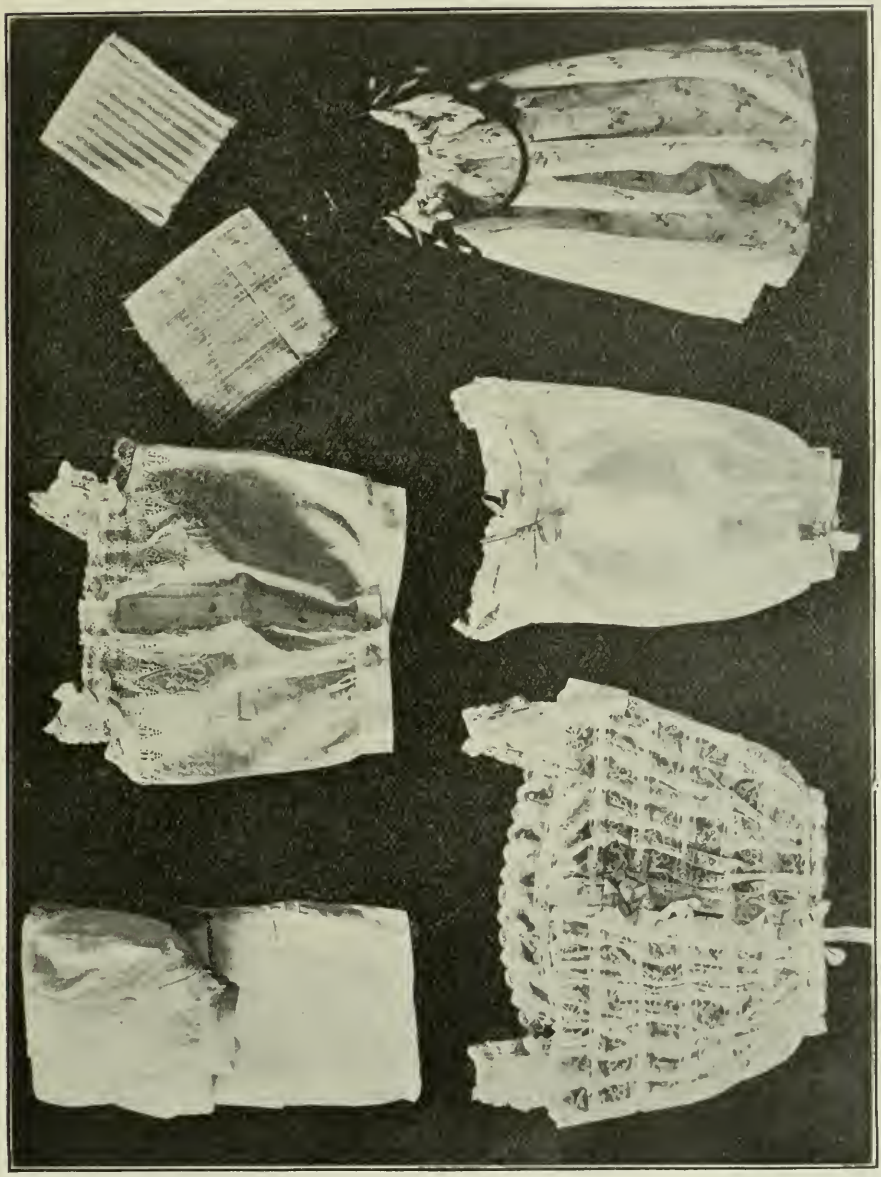
heet from a Bulletin on Constructive Work and Drawing issued by Board of Education, Philadelphia.

PLATE X.

SUGGESTIONS FOR CONSTRUCTIVE WORK FOR FOURTH GRADE

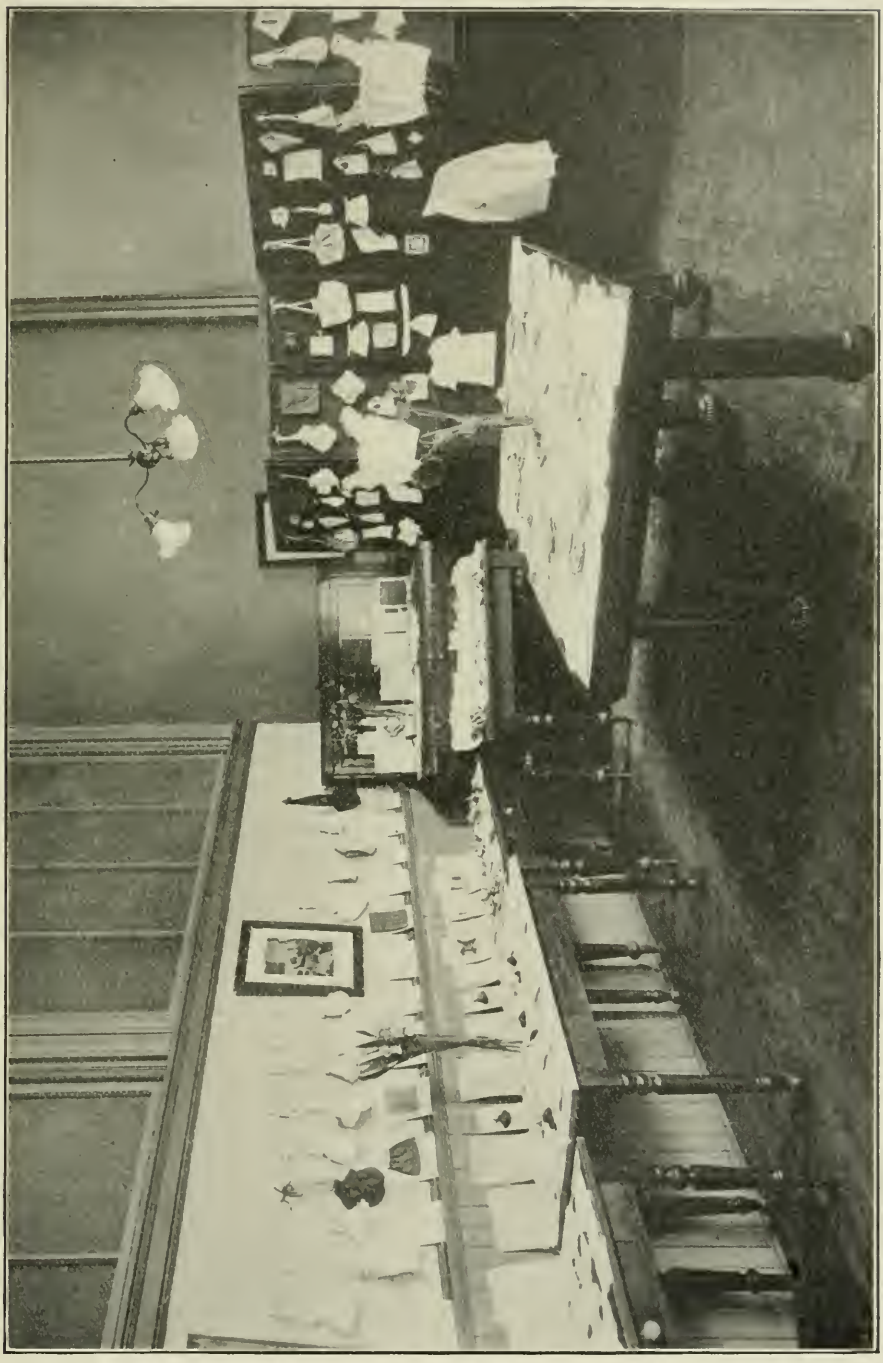

1. PATTERN FOR A SQUARE PRISM
2 PATTERN FOR AN OBLONG BOX WITH LID
3 PATTERN FOR A TRIANGULAR TOOTHPICK HOLDER
4 SQUARE TOOTHPICK HOLDER
5. PIN HOLDER
6. PATTERNS FOR FANCY WALL POCKETS
7 PATTERN FOR COURT PLASTER ENVELOPE
Designs for Top Edge
Designs for Front Edge
8 WALL RACK
8. (A) PATTERN FOR WALL RACK
BACK PIECE
MATCHES
9. PATTERNS FOR A MATCH SAFE
10 TRIANGULAR MATCH SAFE WITH LID

Sheet from a Bulletin on Constructive Work and Drawing issued by Philadelphia Board of Education.



Needlework, Toronto Normal School.

Needlework, Ottawa Model School.



Exhibition of Needlework, Ottawa Model School.

purpose of the subjects, will always find in the ordinary circumstances of school and home life environment and occupations sufficient material to accomplish something in this direction.

Paper, cardboard and clay are the most suitable materials mentioned in the curriculum for carrying on constructive work in the lower grades, and of these clay is probably the most suitable for many reasons. Miss Holland says "The surpassing advantage of clay, however, over other mediums for manual and artistic training is perhaps the possibility of its employment at a very early age. I know no work in which children of all ages will be interested so long, nothing which better cultivates observation and taste, nothing which better teaches at once, persistency, carefulness, industry, neatness and truthfulness. I would therefore urge that provision be made for the increase of brain power in every child through the largest possible development of eye and hand, and that the literary education of our children should be strengthened, step by step, at every stage by manual and artistic training, which includes not only tool work and drawing, but also modelling in clay." Practically the only tools needed are the two hands of the child, and the material itself can be used over and over again if required. The young child is generally more interested in the doing than in the thing done. My last report contains full directions for obtaining the clay and keeping it in good working order. Another great advantage in the use of clay is the assistance it can be made to render to other subjects. No medium is better adapted to elementary modes of free expression than clay or plasticine. The plasticine, while more expensive than clay, has the advantage of needing no preparation. Each child is able from time to time to keep in good condition and use over and over again his individual supply, while it is sufficiently firm to stand for exhibition, and improves by age and use. There is no stage in the public school course where it cannot be used to great advantage and even in the High School it would be found of great service as modelling in its higher forms becomes the handmaiden of painting and sculpture. As showing the capabilities of a course in clay modelling there is given the one drawn up by the authorities of Chicago Normal School for the use of their students. It will repay careful study, particularly under the headings "pupil's motive" and "teacher's aim."

ELEMENTARY COURSE IN CLAY MODELLING

Principles	Problem	Method	Material	Tools	Pupil's Motive	Teacher's Aim
Grade I Representation and Composition	(a) Animal, vegetable, and fruit forms, from nature and imagination	Piece or thumb work—in the round	Modelling clay or plastilina Marble cloth for desk cover	Hands.	Desire to express his power to create	Development of observation and interpretation
	(b) Stories (as Mother Goose rhymes), introducing the figure	In the round—standing on plaque			Tell a story in clay	Informal modelling of figure in composition
Grade II	(a) Animal, vegetable, and fruit forms, from nature, imagination and memory	Piece or thumb work—round and high relief	Modelling clay or plastilina	Hands Small pan for water	To create his idea of objects before him	Development of observation and its free expression
	(b) Primitive houses, such as adobe, tents etc.	Round, on plaque			Expression of modes of shelter	Thought before expression
Grade III Composition Illustration Group in action Constructive design	(a) Games, occupations, children's experiences	High relief on plaque	Modelling clay or plastilina	Hands, sponge, informal wooden tool (meat skewer, match), knife, pan for water	Desire to express intelligently a specific thought	Development of the initiative through individual expression
	(b) Egyptian house	Round, on plaque			Expression of comparative modes of shelter	To assist in the clarifying of images.
Constructive and ornamental design	(c) Tile, with simple geometric design in line and area	Line—incised Area { incised / relief }			To make a pleasing tile for the home	Beauty in construction and decoration.
Grade IV Composition Grouping Selection of motifs	(a) Plaque illustrating specific ideas (Puritan life, special days or seasons)	Relief	Modelling clay or plastilina	Hands, double-end boxwood modelling tool	Desire to represent in a pleasing manner individual interpretation	To develop plastic art in its relation to history, etc.
Beauty in fundamental forms	Elementary pottery forms—trays, bowls, spills, jars, vases, etc.	Pieced and coiled	Potter's clay		Desire to make a form beautiful enough to be made permanent by firing	Thought before expression

ELEMENTARY COURSE IN CLAY MODELLING.—*Continued.*

Principles	Problem	Method.	Material	Tools.	Pupil's Motive.	Teacher's Aim
Grade V Subordination and space value	(a) Illustrate literature of grade. Figure with landscape	Low relief or modelled in two planes	Clay or Plastilina	Hands, modelling tool, sponge, pan	To make a beautiful panel for wall or inlay decoration	Image building through observation and expression
	(b) Common objects (hair receiver, jewel case, ink stand, pitchers) with covers, handles and spouts	Built up or coiled	Potters clay Glaze, kerosene, slip	Kiln, stilts, brush for glaze,	To model a useful and beautiful article for the home	History and development of objects in common use, as the pitcher
	(c) Ornamental designs for objects modelled	Incised; relief, painted, inlaid (as mosaics of coloured clay)	Under glaze, colour			
Grade VI Illustration Proportion Spacing Rhythm Colour	(a) Frieze for decoration of schoolroom (Games, literature, history)	A composite, each pupil contributing a a section. Low relief. Plaster Mould	Modelling clay	As in Grade V	Desire as one of an interested community to contribute his portion for the pleasure of all	Unification of individual creative elements to form a beautiful and æsthetic whole
	(b) Casting of frieze in plaster	Round-built or coiled Incised relief	Plaster, dope, shellac	Dripping pans, spoons		
	(c) Candle-stick, sconce, glazed tile, etc.	Painted (under glaze, colour)				
Grade VII Proportion and Symmetry	(a) Triumphal arches bridges, gateways, etc.	Group problem In the round, to scale	Clay or plastilina Strong wire or band iron (for frame)	Modelling tool, sponge, spoons, pans, cups	To create out of his own environment suitable and artistic recognition of historic and civic merit and need	To awaken an interest in the constructive element of all things beautiful by careful study of historic and natural forms leading to more careful and accurate expression.
	(b) Lamp-bowl, ferneries, bean-baker, cheese-dish, etc.	Hand-modelled Thrown or mould	Potter's clay, dope, plaster, glaze	Wheel, kiln.		
Grade VIII	(a) Half-timbered house or Greek temple	Group problem In the round, to scale	Wood, clay, plaster, Portland cement, Wire lath, staples nails, stains for wood	Hammer, trowel, saw, chisel, tin pan, large spoon, cup	To be the creator of a beautiful, purposeful thing, carrying with it the elements of historic and literary art, together with practical construction.	Through the development of more careful and accurate expression to lead to a cultured appreciation, enlarging the life of the individual by stimulating to higher ideals, nobler living, truer standards of citizenship
	(b) Cast in plaster with decorations	{ In relief { In colour				
	(c) Clock-case, window box, wall-pocket, etc.	Hand-modelled Thrown or mould	(Frame work best made in manual training shop)			

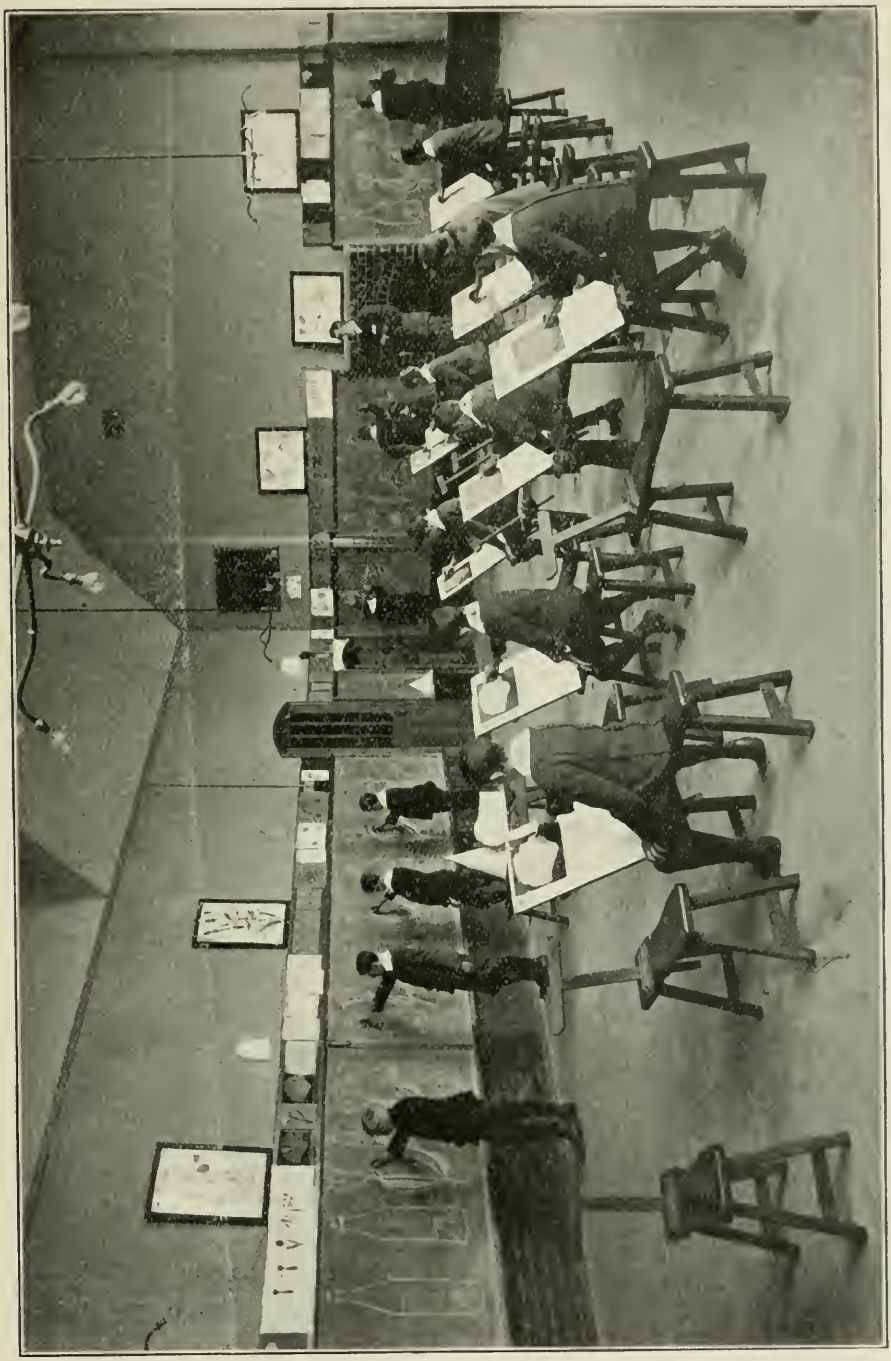
The proper place of this subject in any course of study is as a help to means of expression in other subjects and much experimentation has been made in order to secure proper balance and co-ordination. The following will serve as examples of this use:—Indian wigwams and canoes, windmills, historic houses, methods of transportation, occupations, the school and home garden, rules and measures, work suggested by history, geography, and nature study.

The subject of Constructive Work has been somewhat fully dealt with as it is felt that it is not possible to reap the full advantage of any scheme of Technical Education that may be adopted in the Province unless the foundation on which it must be built is securely laid. We are already feeling this in every manual training and household science centre in the Province. Boys and girls are attending these, who have had no preliminary hand training of any description and the consequence is that one of their most valuable years has to be devoted to acquiring the most elementary notions of form, line and construction, that should have been mastered at a much earlier stage in the school career. There is probably no greater and more influential association than the National Educational Association of the United States. In the declaration of its principles unanimously adopted in 1905 occurs the following: "The Association heartily approves of the efforts now being made to determine the proper place of industrial education in the public schools. We believe that the time is rapidly approaching when industrial education should be introduced into all schools and should be made to harmonize with the occupations of the community. These courses, when introduced, should include instruction in agricultural as well as manual training, etc. Wherever the conditions justify their establishment schools that show the application of the branches of knowledge to practical life should be established. The Association regrets the revival in some quarters of the idea that the common school is a place for teaching nothing but reading, spelling, writing and ciphering, and takes this occasion to declare that the ultimate object of popular education is to teach the children to live righteously and happily, and that to accomplish this object it is essential that every school inculcate the love of truth, justice, purity and beauty through the study of biography, history, ethics, natural history, music, drawing and manual arts."

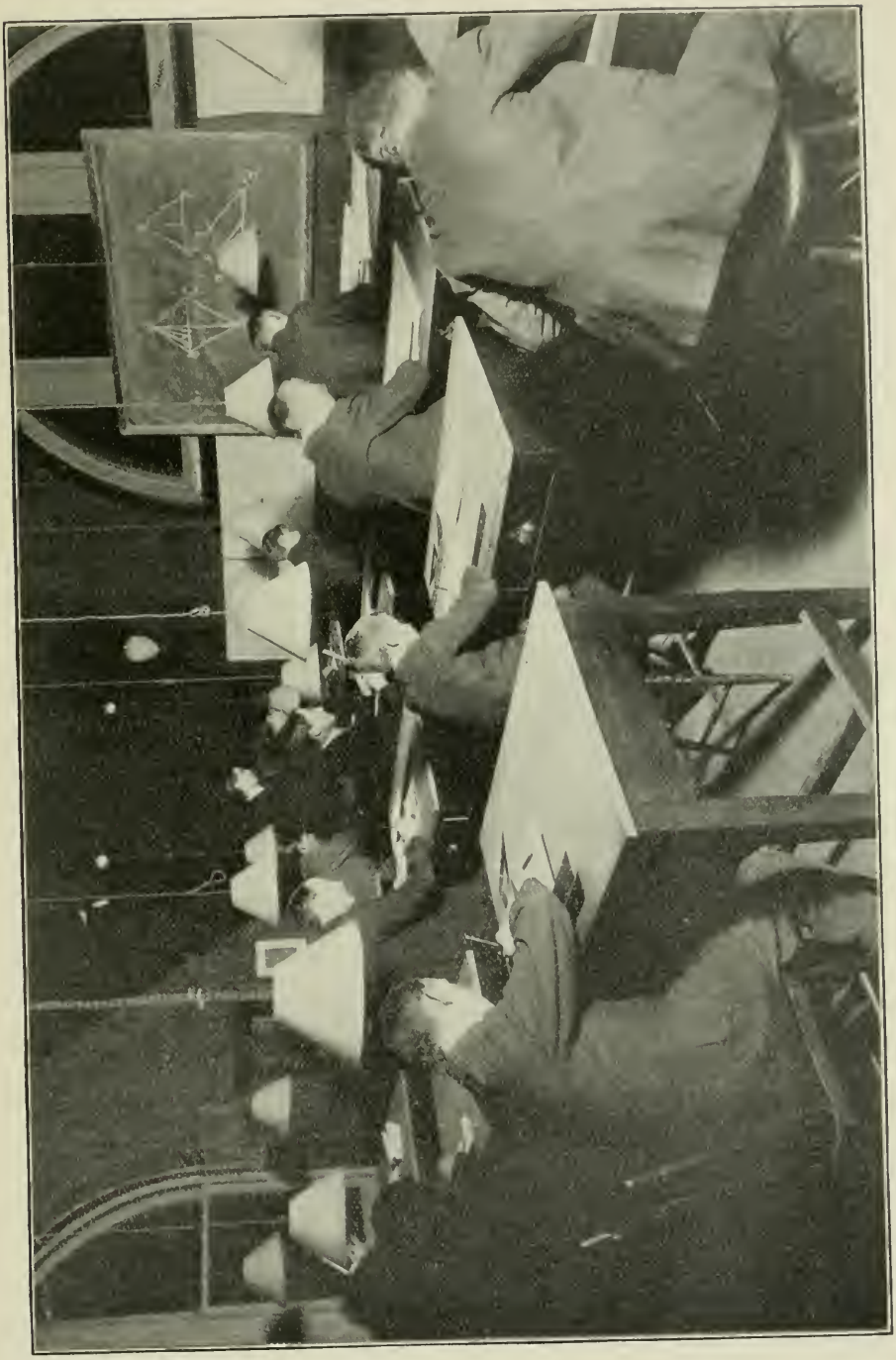
Needlework.

With the exception of very few schools this subject is totally ignored. For many reasons this is much to be regretted.

Every English elementary school for girls, devotes at least two hours per week to this subject, from the lowest grades to the end of the public school course. The importance of the subject can scarcely be over-estimated. The failure to teach it can hardly be understood, particularly when it is remembered that the equipment necessary is of the slightest and might reasonably be expected to be provided by every girl. By needlework is not meant ornamental work, but ordinary plain every-day sewing. Every girl should be taught to use the needle, the thimble and the scissors well, quickly, and easily. This is far more readily accomplished when she is between seven and twelve years old. The hand, the greatest and most delicate of all instruments is then supple and far more easily trained than at any other period. The mind is alert and the practice necessary to gain some degree of skill is not then looked upon as drudgery as is often the case in later life. Girls delight to sew especially in company with their fellows and are interested when a graded course is followed which they can see begins with simple exercises and increases in difficulty step by step until



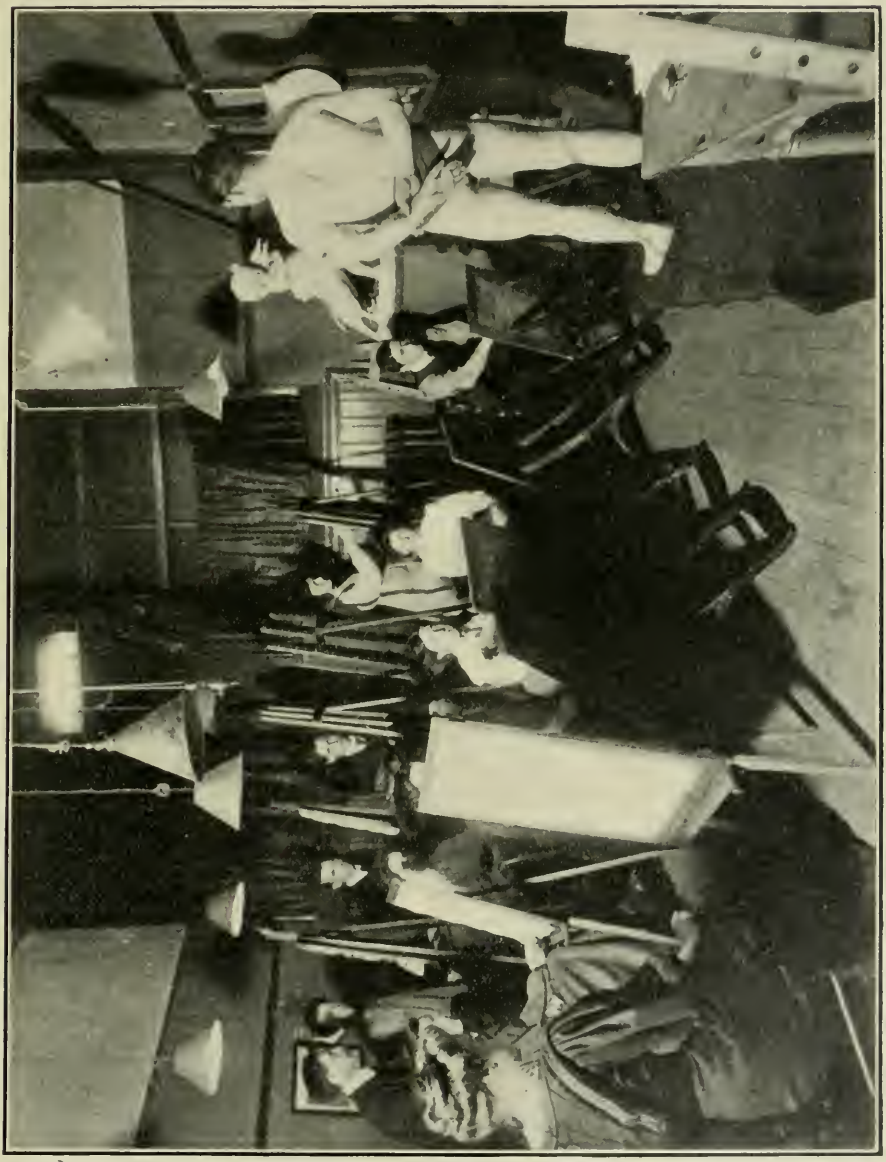
"Art Room" in an English Elementary School.



School of Art and Technology, Hamilton.

Hamilton School of Art and Technology.

Hamilton Art School.



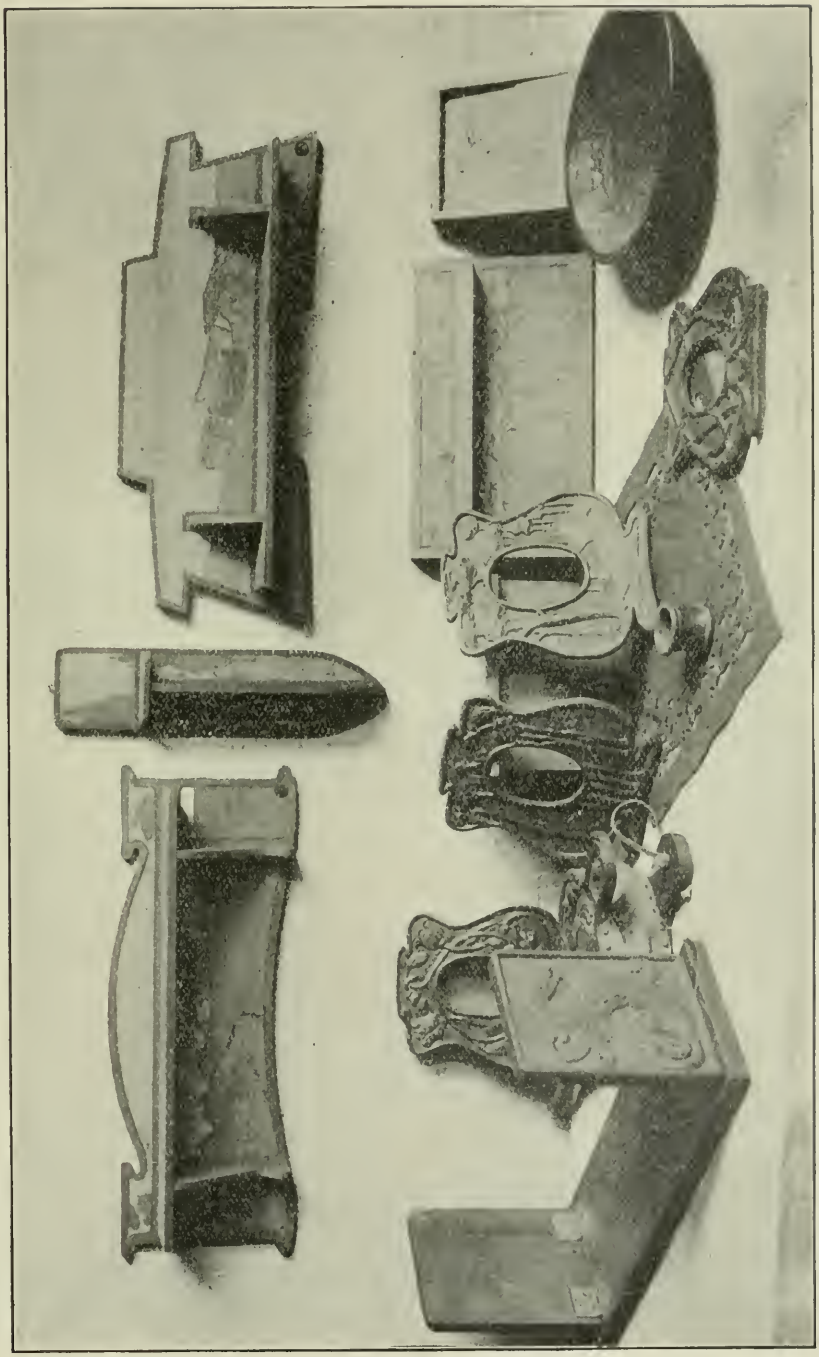
"Life" Class, Hamilton Art School.

they find themselves master of so many stitches and able to work so accurately as to be able to cut, make and fit a garment. In the case of this subject we do not go to the United States for examples of the best organization and teaching. That country very largely holds the opinion that household science consists of cookery only. This is an opinion from which we are by no means free and I have had some difficulty in persuading one or two so-called teachers of household science that needlework was just as important a part of their work as cookery. It is still possible to find important cities in the United States where no instruction in sewing is included in elementary school work. In a report issued by the English Board of Education the following causes are given to account for this fact. "There are those who attribute it to the very rapid development of the country, with which its system of education, in spite of its great elasticity finds it no easy task to keep pace, but a few years since in many districts the distance to be accomplished to reach a school made the attendance so limited in time that only subjects which could not be acquired at home found a place in the school time table. (2) The sudden advancement of industrial fortunes co-incident with the country's growth threw the mental perspective of the masses awry so that parental and public misconceptions of the value and dignity of manual occupations bulk yet as large obstacles to the universal introduction of needlework into the grade schools. (3) The world wide slow dying delusion that book learning is the only agent of culture, and that attention should be concentrated upon the printed page during school hours, is still responsible for the continued existence of a monotony of method under some Boards of Education by whom the intellectual stimulus derived from variety of occupation is as yet imperfectly recognized."

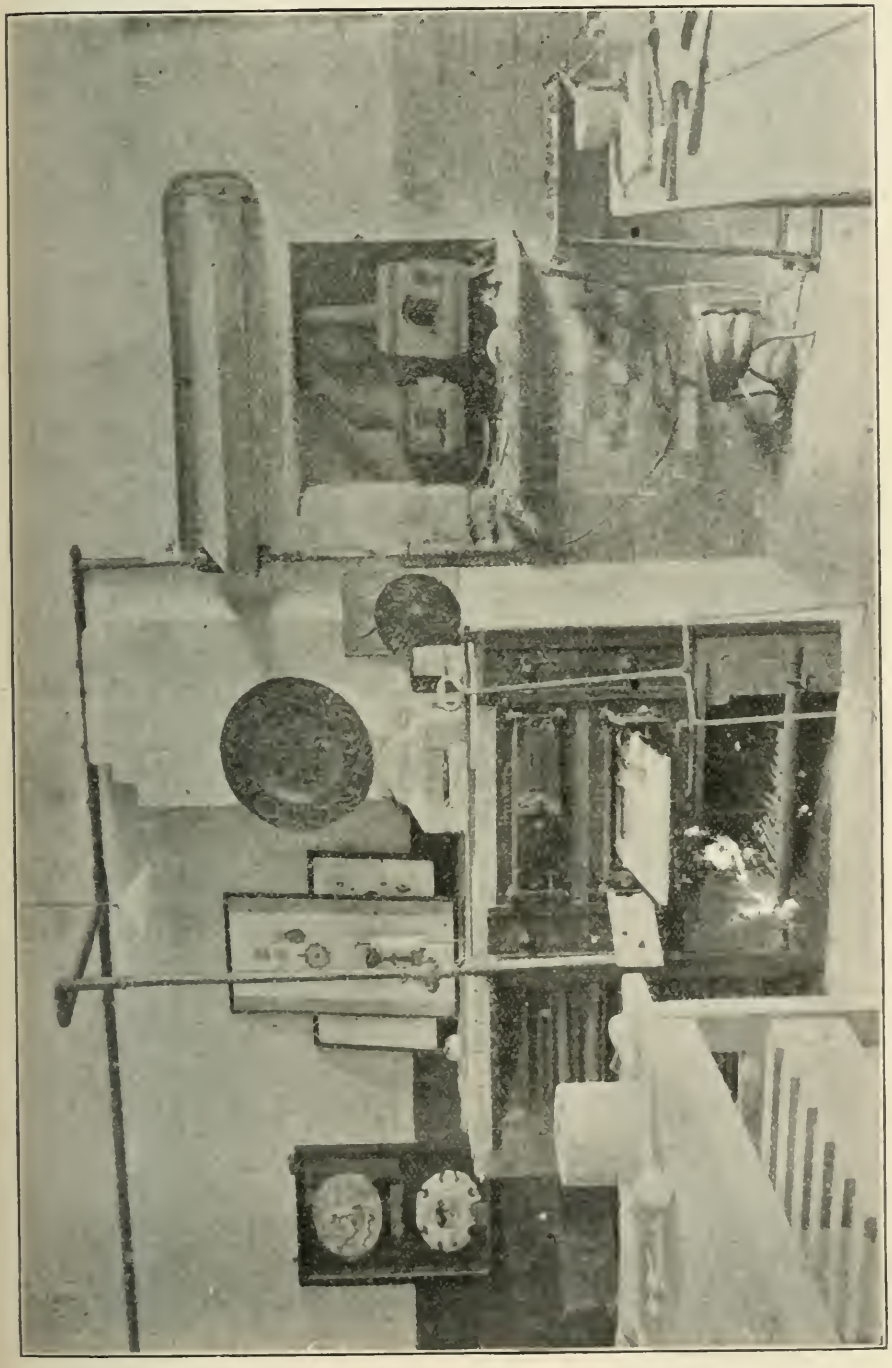
Where sewing is taught the custom seems general of employing for the little ones coarse canvas, and it is a rare occurrence to find the use of fine material, appropriately coloured thread on a cream toned mat being generally employed during the earlier stages in order to avoid any undue strain on the eyes. Great attention is paid to the artistic side of the work, beauty of form, selection and combination of harmonious colours are dealt with at every stage. Large frames of coarse canvas are supplied for the use of the teacher in demonstrating the various stitches and a liberal use is made of the blackboard throughout. Importance is attached to cleanliness and the orderly care of material. In the report above referred to occurs the following description of an inexpensive case for storing work and material. "It consists of a series of nine wooden shelves arranged between two standards 4½ ft. by 1 ft. placed against the wall. Arranged in tiers of seven on each shelf are strong pasteboard boxes, furnished with small brass rings so that they can be drawn out with ease. Each box is twelve inches long, by eight inches wide, by five inches deep. On the front part beneath the ring is pasted a slip of paper bearing the name of the pupil whose work is placed in the box." The innate mechanical ability of the American shows itself in many neat simple devices of this kind, which economise trouble and promote order and cleanliness. At Buffalo the boys make work cabinets for the girls' use as part of their manual training. In some Philadelphia schools a simple labour saving appliance is in use, devised and made by one of the staff. A piece of stiff card is fitted about 1½ inches below the surface of a wooden (cigar) box, the card being perforated with rows of oblong holes. At the conclusion of each sewing class the box is carried round by one of the pupils; each of her companions drops her scissors into one of the slits, the number of which corresponds to the number of scissors in use. The whole number is rapidly collected and

ready for the next occasion. The absence of a pair is immediately detected, while the blades are protected from damage and rust. In some of the schools in Brookline, Mass. the lessons in the advanced classes are made much more interesting and effective by the use of a well proportioned doll about the size of a child of four years of age. Upon this, garments of every description are fitted by the makers who are thus encouraged to careful measurement and cutting out, skill in fitting and in economic use of material. In Philadelphia forty instructors in sewing are under the direction of the Supervisor and about 60,000 girls receive weekly lessons. In some schools boys share the instruction and are said to be among the brightest pupils. The city allows six cents per year for each child taking the work.

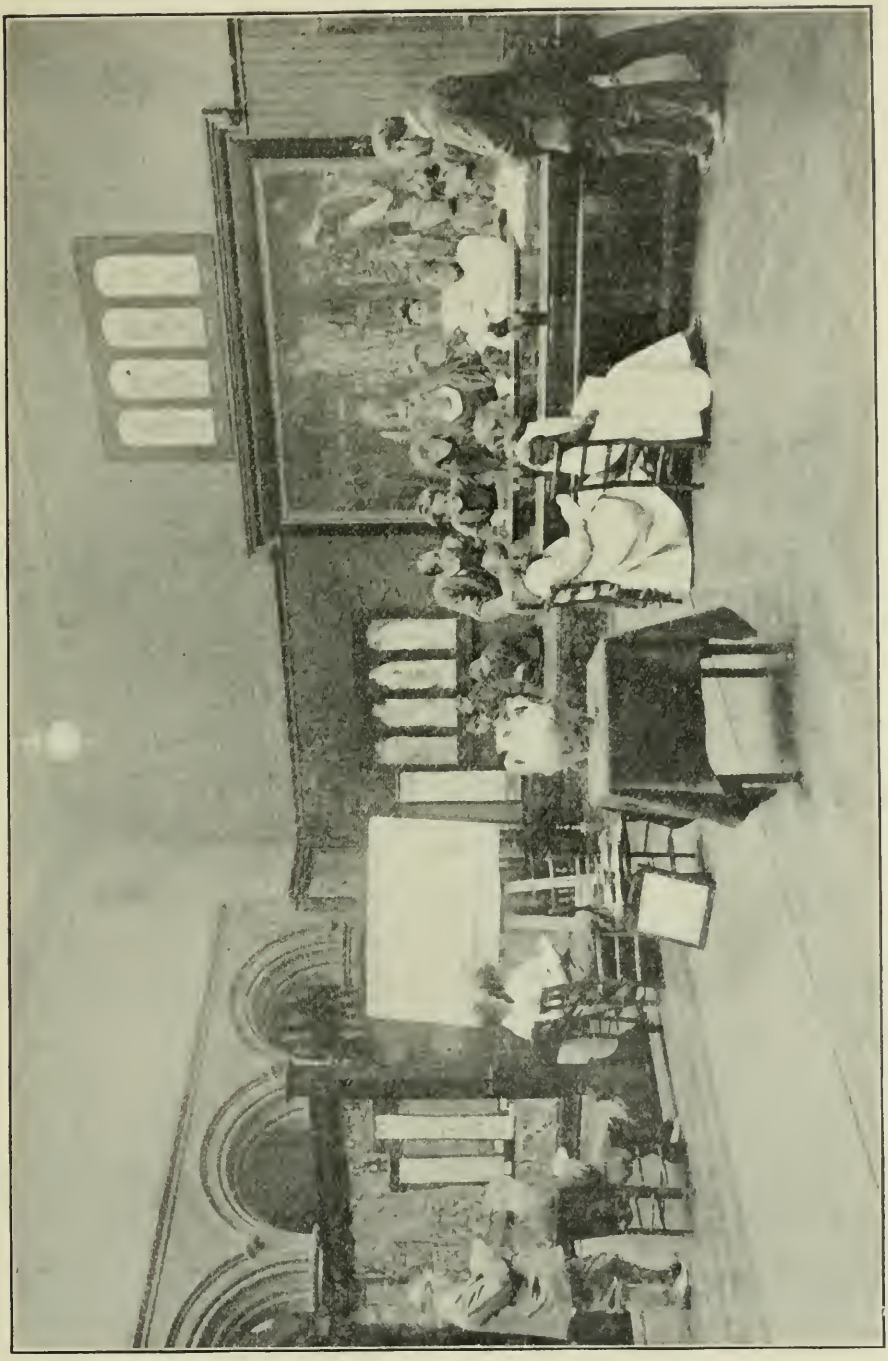
We must go farther afield than the United States to find sewing given its full importance in all grades of schools. Switzerland and Belgium lead the world in the number and excellence of household science schools . In Switzerland the industrial educator bears the mistress in mind as well as the servant. France with her thrift and industry is hardly second to Switzerland and Belgium. Paris has a course of domestic art which begins with the Kindergarten and continues for ten or twelve years. It has often been said that a French family could live comfortably on what an American family wastes and throws away. The result is that there is no finer housewife the world over than the French woman. Every woman knows needlework and dressmaking and the result is seen in the predominance of French fashions and taste. A detailed description follows of the organization and methods of such work in Belgium. The information is gathered from a report issued by the Board of Education, Whitehall. The first administrative measures for the promotion of needlework in Belgian schools, date from Maria Theresa who published a general ordinance in 1774, but it was not until 1879 that the subject was made compulsory in all primary schools for girls. The instruction aims at practical results, and by this is meant everything which is applicable to the homes of working men, labourers, small tradesmen, etc. Great attention is paid to the making and mending of ordinary garments, and fancy ornamental work is only allowed when useful sewing has been mastered and even when allowed, it generally consists of trimmings for linen and clothes. An attempt is also made to form their taste and to demonstrate that true beauty and elegance are best found in simplicity; no ornaments are allowed to be bought, everything must be made. Needlework is taught to the whole class simultaneously with individual correction. The first step consists of explanations and demonstrations before the pupils Everything is done before the children on a large scale so that all may see; knitting for example will be shown with large wooden needles and with thick wool of two colours so that each stitch is easily distinguishable. This is followed by a close examination of real knitted articles such as stockings, etc. In like manner the different sewing stitches are first demonstrated on a canvas frame with a large needle and thick coloured thread. Practical application follows the learning of each stitch. When pieces of work are too difficult for the lower grade to finish, they are handed to the pupils of the upper to finish, in order to teach the girls to help each other; cuffs, for instance, are sometimes finished with crochet work by the pupils of the middle standards, and children's petticoats knitted in strips by the younger children, are joined and put into a waist band by the older. In the older classes when cutting out is learnt measurements are taken by one pupil from another before the class, the pattern is drawn, and cut out in paper and then in the material, then comes the necessary tacking together, fitting, correcting and making up. The lessons on cutting out are accompanied by talks on raw materials, the choice of stuffs from the point of view of price, usefulness,



Decorated Woodwork, School of Art and Technology, Hamilton.



Workshop for Stained Glass and Repoussé Work, Manchester School of Art



Textile Court of Arts and Crafts Museum, Municipal School of Art, Manchester (Eng.).

Worked Designs for Cushion Covers, Hamilton Art School.

taste, their hygienic properties, etc. Technological collections (cotton industry, wool industry, etc.), are made together with collections of patterns. All the work done by the pupils is in actual sizes and not on a reduced scale. As far as possible articles are chosen which can be used by the girls themselves. The necessary materials are supplied gratis by the Communal Council. In some Communes the pupils are given all the articles which they make themselves; in others the articles are distributed at the end of the school year, or at the beginning of winter to the neediest children in the school.

At every favourable opportunity the subjects of other lessons is chosen, so as to co-relate with the principles taught in the needlework lesson. In arithmetic the pupils calculate the cost of the work that has been done. In the upper classes they are taught to calculate beforehand the cost of the stuff and materials necessary for the work and to translate into figures the economy of doing certain work themselves. Subjects bearing on needlework are chosen for reading, writing, dictation lessons, etc.

Drawing in girls' schools is taught with special reference to needlework. The model course issued by the Government includes designs for letters and figures for marking, for borders, frillings and embroidery of various kinds, patterns for various garments, representations of the various kinds of darning and patching, and lessons on the choice of colours for embroidery, for dress material, etc.

The specimen syllabus issued by the Ministry in 1897, allows three hours a week for needlework in the first two school years, and four hours for the remainder of the school career. The following is the course laid down:

Lower Standards. Knitting a band or garter (two needles); study of the stitches; stitches on the right side; stitches on the wrong side; edges; increasing and decreasing; how to cast on stitches. Knitting (four needles) cuffs; socks; study of relative proportions, casting on and knitting.

Middle Standards. Recapitulation of the preceding course. Knitting stockings; study of the relative proportions; drawing a stocking and its different parts in their relative proportions; casting on and knitting; how to measure the stocking in course of making it; how to strengthen the heel; study of cross stitch on canvas; letters and numbers; elements of sewing; running; backstitching; overcasting; seam; hem; French double seam; oversewing; selvedge; oversewing folded edge. Making simple and easy articles; towels, napkins, handkerchiefs, aprons, chemises, patching.

Upper Standards. Recapitulation of the preceding course. Knitting a vest, mittens. Marking linen, letters and numbers. Stitching, gathers, button holes, eyelet holes. Mending garments; simple darning, and darning according to the web, of stockings; patching linen and garments; fine darning on linen and table linen. Cutting out and making easy garments, especially chemises and bodices. Note that fancy work, crochet, embroidery, tapestry work, etc., should only be taught to those pupils who have mastered useful sewing.

It is to be hoped that in the near future much greater attention will be paid to this subject in every grade of school in the Province.

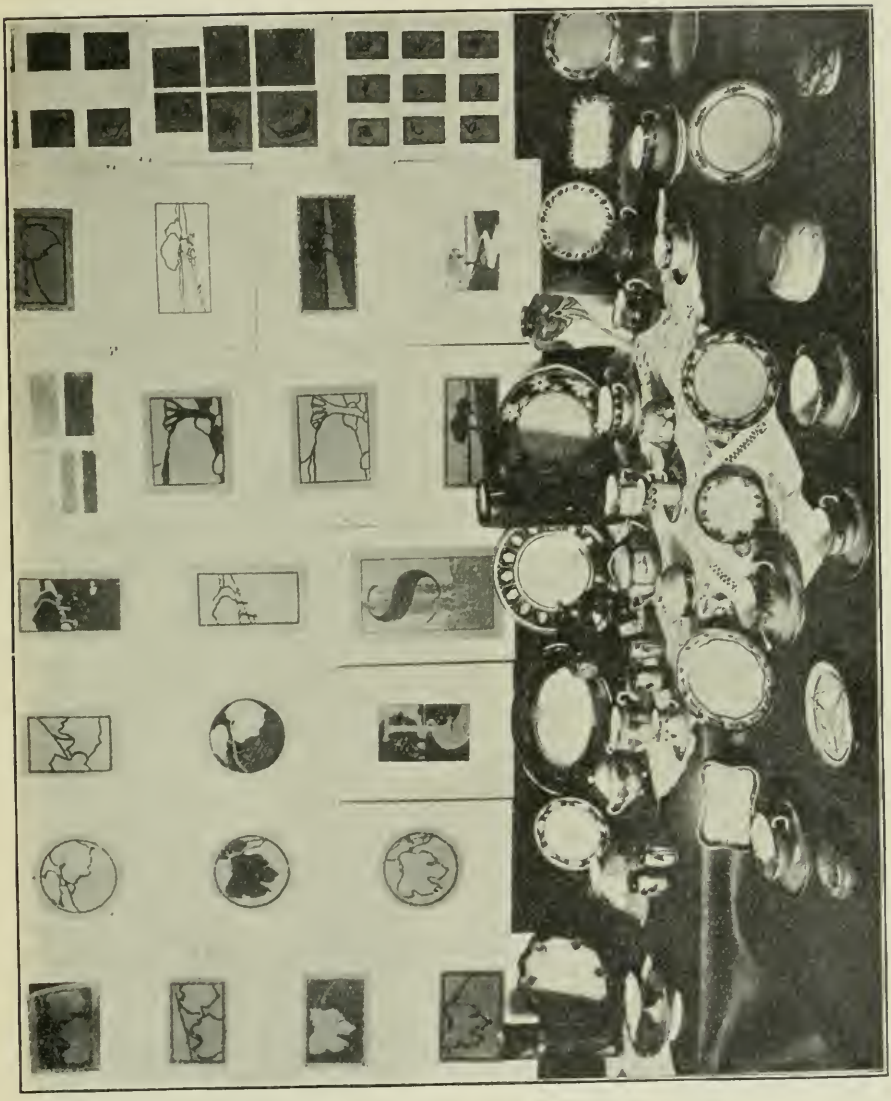
Ruskin says "Learn the sound qualities of all useful stuffs and make everything of the best you can get, whatever its price and then every day make some little piece of useful clothing, sewn with your own fingers as strongly as it can be stitched, and embroider it or otherwise beautify it moderately with fine needlework such as a girl may be proud of having done."

Art.

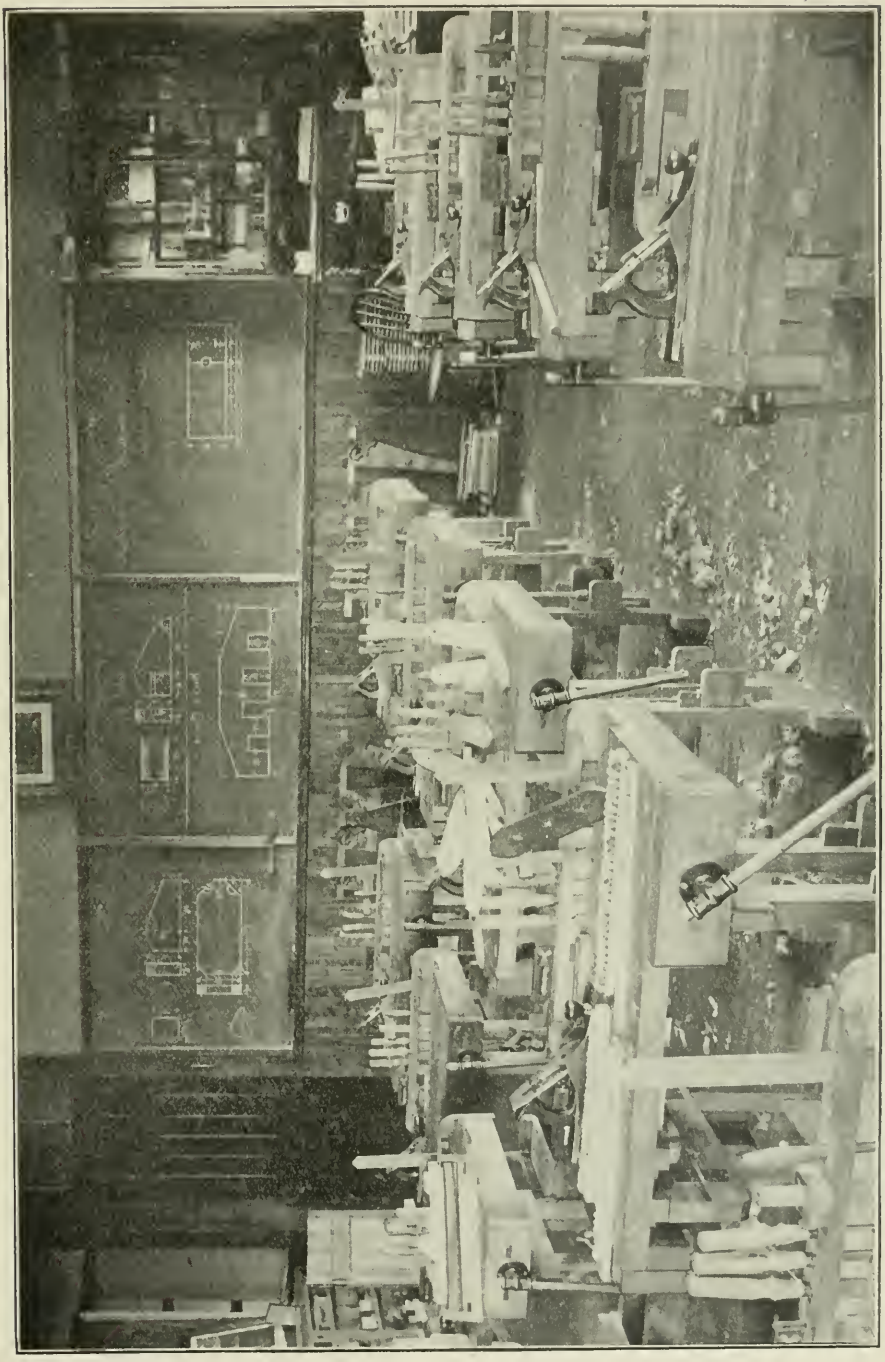
Judging from the reports of the Public School Inspectors "Art" in one form or another is "attempted" with more or less efficiency in almost every

school in the Province. The terms art and drawing are by no means synonomous. Art is the larger term and as at present taught does not in many cases include the latter. The history of the subject in this Province, follows very closely the course pursued in other countries. First came the rigid copying of flat copies with a line of poker-like stiffness, drawing of type models, no imagination, no colour, no freedom, only rigid adherence to type. After about thirty years of this came a revolt, flat copies, type models, the ruler and all instruments of precision were abolished and free drawing, the unrestricted play of the imagination, and the plentiful use of colour became the objects to be aimed at, and this is very largely where we stand to-day outside one or two notable exceptions. In the reaction against stiffness, rigidity and authority, we have swung over and colour is now the be all and end all of many attempts in this subject. Whatever the merits and demerits of the old system it certainly had one great advantage, that of inculcating fidelity and accuracy. Now some of the drawings so called, that we get, do not bear "the likeness of anything that is in heaven above, or that is in the earth beneath or that is in the water under the earth." One Inspector calls it "a little daubing of colours" and "a waste of time and a debasing of taste." A child's interest in making pretty things should not be allowed to crowd out his interest in making them right. I do not wish to be misunderstood in this connection. The introduction of colour has certainly revived interest in a subject that had grown lifeless and dead and no course of drawing that claims to be educational and practical can take the retrograde step of banishing it, but it should in every case be secondary to good drawing. The most brilliant display of colour loses its effect when accompanied by bad drawing. The function of drawing in the public school, while it is educational and develops an æsthetic appreciation for beauty, aims to develop many future artisans and not a few artists and both purposes should be kept fully in view. At present it looks as though we were trying to turn every public school pupil into an artist and the attempt must in the nature of things fail. The course must be both practical and æsthetic, training the many to become productive artisans and all to be able to appreciate and derive pleasure from the contemplation of the great masterpieces of nature, painting, oratory, music and construction.

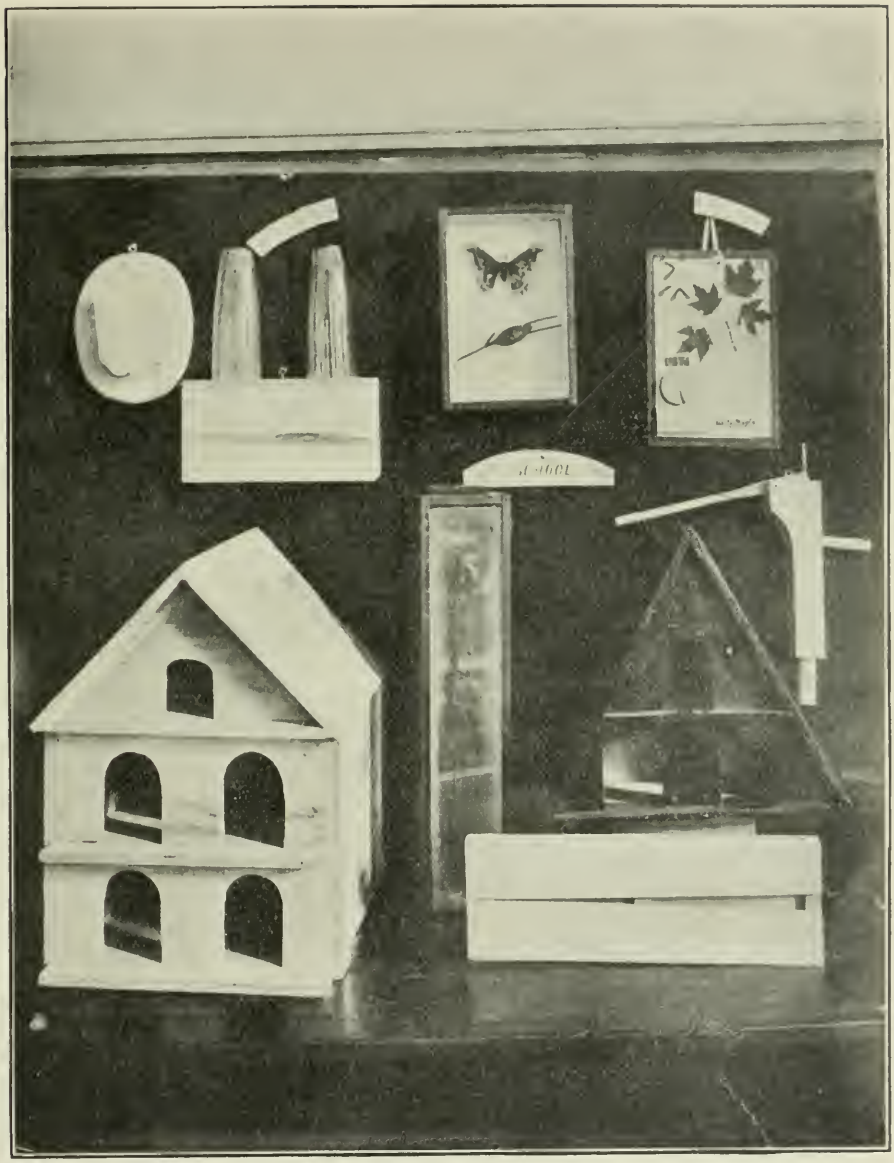
Closely related to both what may be called the pictorial and the industrial, is "memory drawing" according to the following plan. Children study the object to be drawn. Then it is removed from sight and they draw from the mental image. After they have gone as far as they can in recording first impressions, the object is again studied, then removed and further impressions recorded. No drawing is done while the object can be seen. The great advantage of this plan is that the children see and sketch the different objects as wholes and not as a collection of details seen one at a time. Such memory drawing is said to be the prevailing method in Japan. Mortimer Menpes in his book "Japan—a Record in Colour" says "Nowhere is the difference between European and Japanese Art so sharply accentuated as it is in the great schools of the East and the West. We Westerners are taught to draw direct from the object or model before us on the platform, whereas the Japanese are taught to study every detail of their model, and to store their brains with impressions of every curve and line, afterwards to go away and draw that object from memory. This is a splendid training for the memory and the eye as it teaches one to see and remember . . . . Kiyosai next began to discuss drawing, and as he was speaking to an Englishman, English drawing in particular. 'I hear that when artists in England are painting,' he said, 'if they are painting a bird they stand that bird up in their back garden or in their studio and begin to paint it at once . . . . Now, suppose



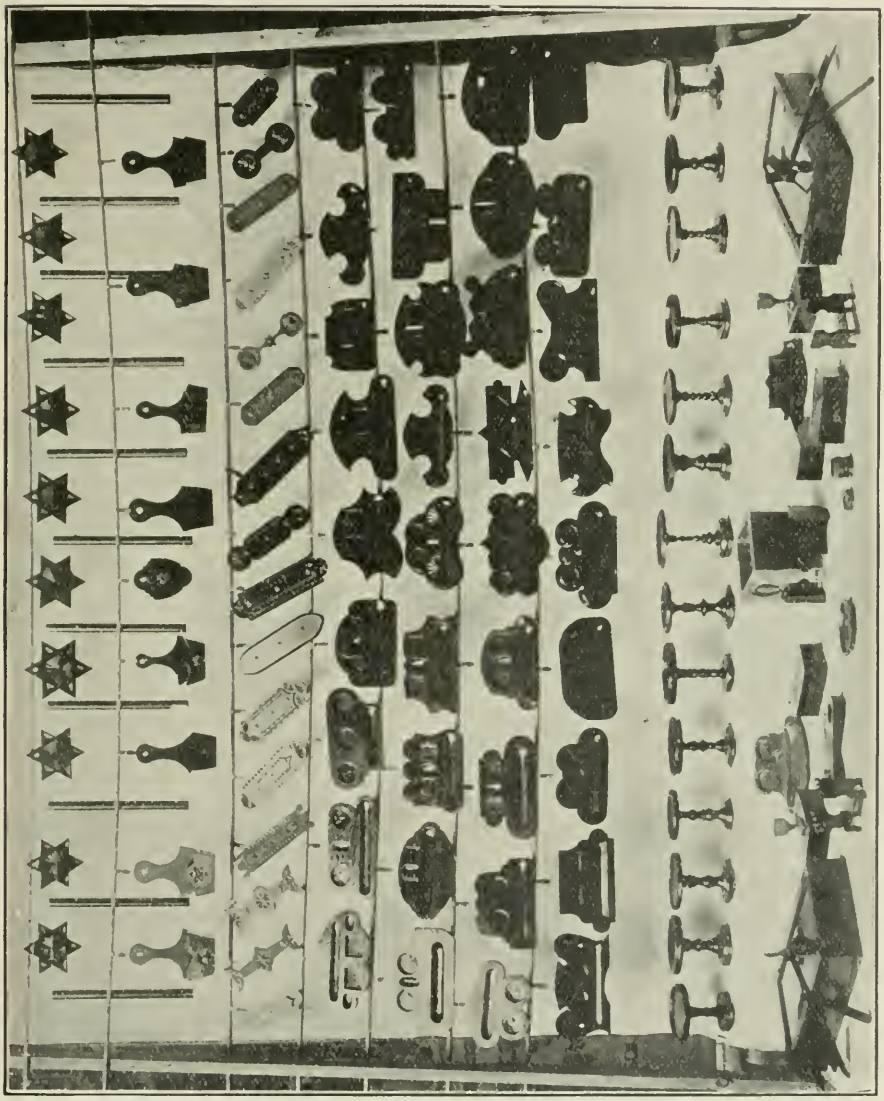
China Painting and Design, Hamilton Art School.



Manual Training Room, Public School, St. Thomas.



Woodwork. Ottawa Normal School.



Individual Designs. Woodstock.

that bird suddenly moves one leg up,—what does the English artist do then?' I asked him what then was his method. 'I watch my bird,' he replied, 'and the particular pose I wish to copy before I attempt to represent it. I observe very closely until he moves, and the attitude is altered. Then I go away and record as much of that particular pose as I can remember. Perhaps I may be able to put down only three or four lines: but directly I have lost the impression I stop. Then I go back again and study that bird until it takes the same position as before; and then I again try and retain as much as I can of it . . . . It is a hindrance to have a model before me when I have a mental note of the pose. What I do is a painting from memory and it is a true impression'."

The general study of art in the public schools should develop (1) observation, (2) expression and (3) appreciation. There is nothing more important in the teaching of drawing, or of any other subject for that matter than the development of correct thinking, clear seeing and adequate expression and it is precisely this ability to appreciate accuracy in much of the art work that is being done that we are in danger of missing.

With all our defects, progress is being made, interest is being manifested, and the subject is receiving greater attention than ever before but it is my duty to point out dangers and pitfalls, so that we may not rush blindly into them.

The best work in the Province is being done, as might have been expected, in those towns that employ Supervisors to direct it. In Toronto and London particularly, I have seen work that cannot be excelled by public school children either in England or the United States. The annual exhibition of public school work in these two places has done much to stimulate interest in it, and the plan followed can be recommended to other authorities as an effective means of arousing public interest in the work of the school. The improvement in taste, design and practical usefulness of the work in these cities during the past five years is almost miraculous.

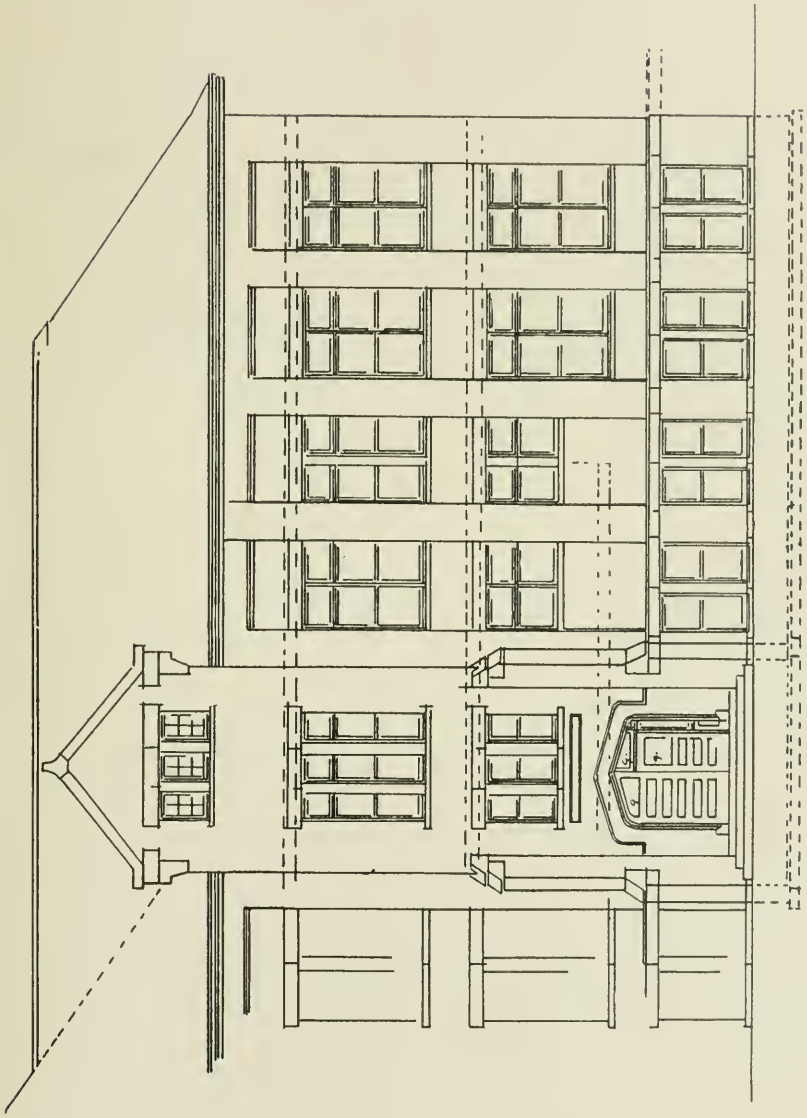
In work of this character particular attention should be paid towards raising the *average* excellence. There are few places where the work of special boys and girls does not show the greatest promise, but a teacher's success does not consist in producing one or two of these and attempting to gain a reputation on their work, but on the average results that can be produced from the whole class. The necessity that exists for the giving of this training in the Public Schools is strongly shown by the following quotation from "The School and Society": "Hardly one per cent. of the entire school population ever attains to what we call higher education; only five per cent. to the grade of our high school; while much more than half leave on, or before, the completion of the fifth year of the elementary grade. The simple facts of the case are that in the great majority of human beings the distinctively intellectual interest is not dominant. They have the so-called practical impulse and disposition. In many of those in whom by nature intellectual interest is strong, social conditions prevent its adequate realization. Consequently by far the larger number of pupils leave school as soon as they have acquired the rudiments of learning— as soon as they have enough of the symbols of reading, writing and calculation to be of practical use to them in getting a living. While our educational leaders are talking of culture, the development of personality, etc., as the end and aim of education, the great majority of those who pass under the tuition of the school regard it as only a narrowly practical tool with which to get bread and butter enough to eke out a restricted life. If we were to conceive our educational end and aim in a less exclusive way, if we were to introduce into educational processes the activities which do appeal to those

whose dominant interest is to do and make, we should find that the hold of the school upon its members would be more vital, more prolonged." The conditions described in the above quotation very largely obtain in our own Province.

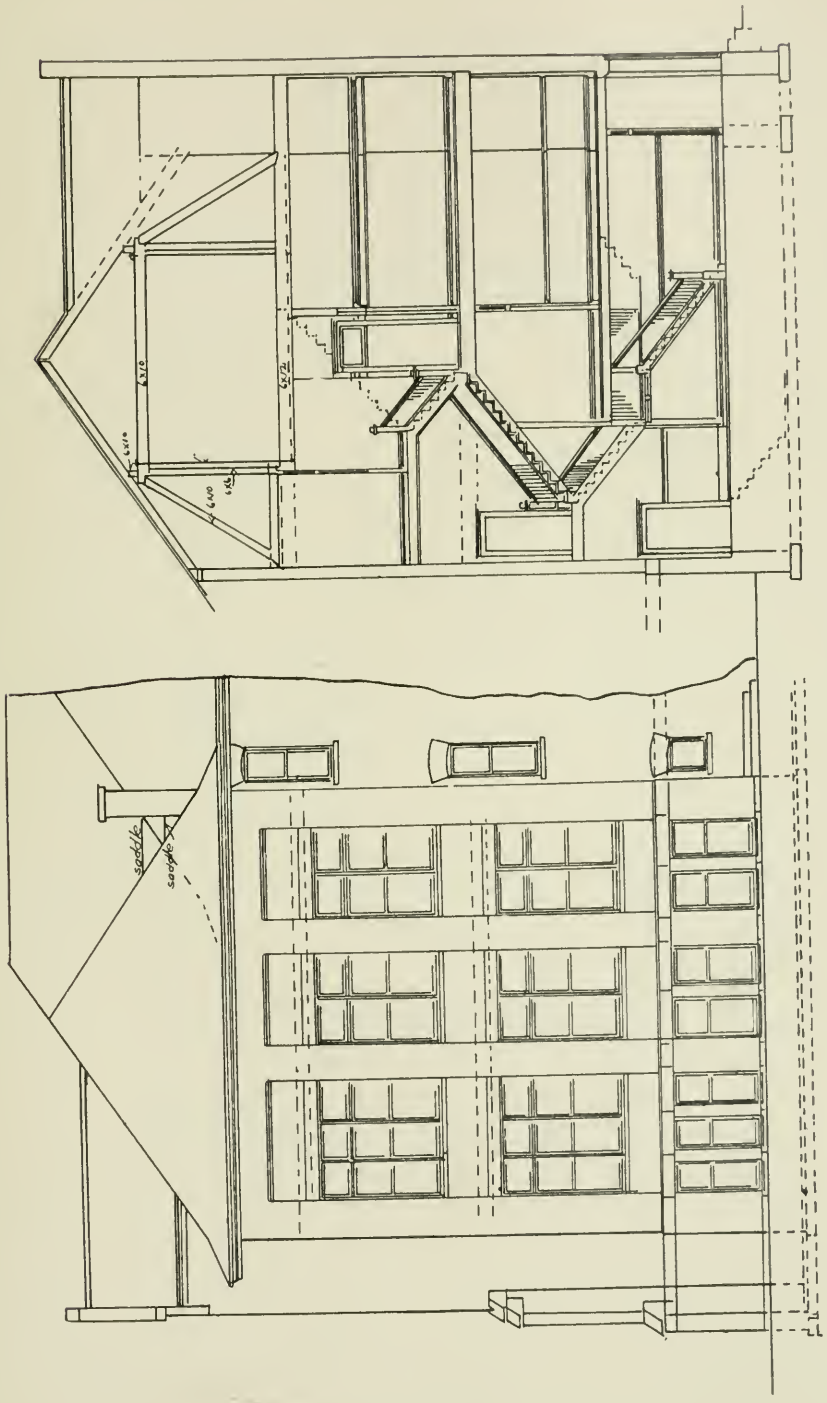
In many of the English elementary schools, especially those erected during the past four or five years, there has been provided, in addition to the ordinary class rooms, a room devoted especially to art instruction. An illustration of one of these rooms is shown. In this Province, at least every Collegiate Institute should have such a room properly equipped, fitted and lighted so that the instruction may be given under the best possible conditions.

I have pointed out on several previous occasions the utter lack of facilities for adequate art training that at present exists in the country. The result of this is that our teachers are handicapped and forced to struggle under immense difficulties to gain the knowledge they require and our industries are suffering from the lack of native trained designers. Our two inadequately supported art schools are doing good work as far as their limited resources, antiquated equipment and wretched accommodation will permit, but as far as efficient training in pictorial and industrial art is concerned we are simply playing at it and even that not successfully. One marked omission in the two art schools that are still existing is the failure to give the students any facilities for the practical carrying out of their designs in the material for which they are supposed to be intended. "The Council of Advice for Art appointed by the British Government has expressed the opinion that facilities should be given to students in schools of art, to carry out, or to see carried out, some of their own designs in the material for which they were designed, as this would show whether or not they were suitable. The council felt that nothing but harm could come from encouraging students to make designs, on paper or in plaster, without any knowledge of their suitability for execution in the material employed. The regulations have now been altered so that practice by students in design classes of craft methods for executing work in actual materials is recognized as a constituent part of a student's art training."

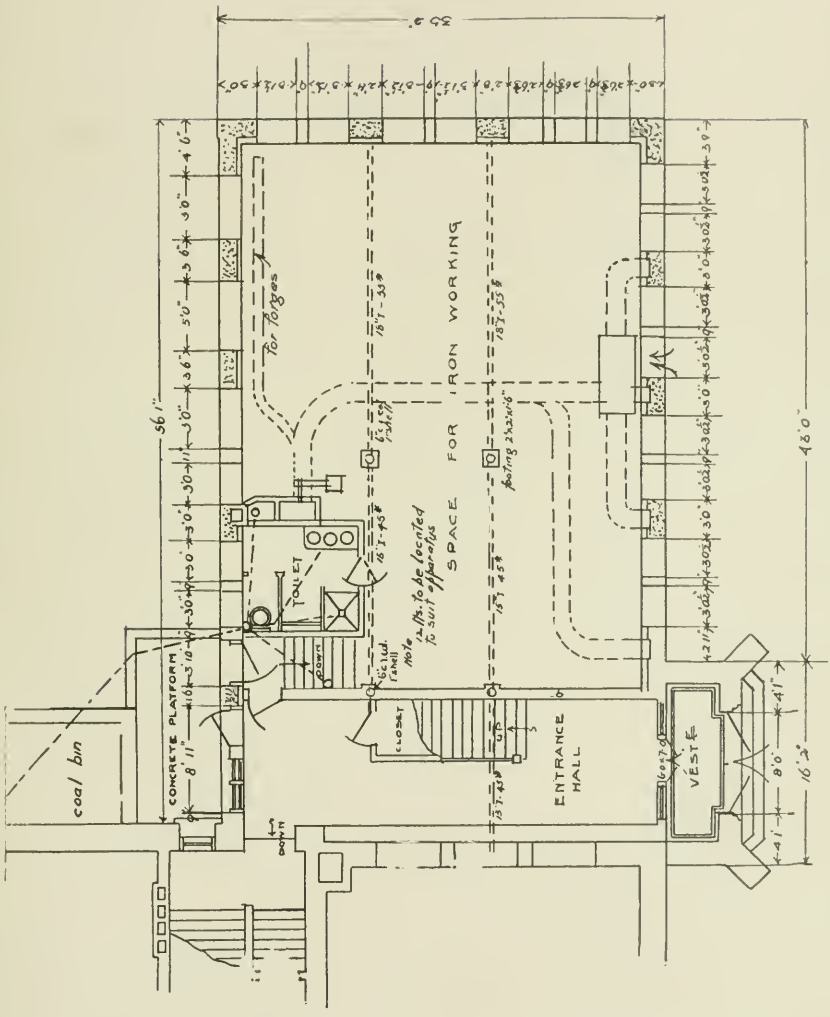
Under the auspices of the Department there have been held two examinations for the Art Specialist Certificate. These were taken by teachers who with the exception of some private tuition, had worked up the subject alone, with one exception. That one exception after graduating from one of our Normal Schools was forced to leave his native country and proceed to a foreign art school, where he took a course for one year, in order to obtain that grasp of his subject which he felt was desirable and the result was seen in the character of his work. This should not be. No student should be forced to go abroad to obtain that which his own country should provide for him. A few notes on what Great Britian has done for industrial art education may not be out of place. In 1835, a motion was made for a select committee of the House of Commons "to inquire into the best means of extending a knowledge of the arts and the principles of design among the people (especially the manufacturing population) of the country." This committee reported the next year that the best means of obtaining industrial art training was by the establishment of schools of design. In June, 1837, the Normal School of Design was opened in Somerset House in rooms formerly occupied by the Royal Academy. Thus early and modestly Great Britain laid the foundation of that scheme of art industrial training which has today covered the country with over 350 art schools and classes. The next step was taken in 1841 when the Government decided to assist in the formation and maintenance of such schools in the manufacturing districts. This was done by an annual grant for the training and payment of teachers, for



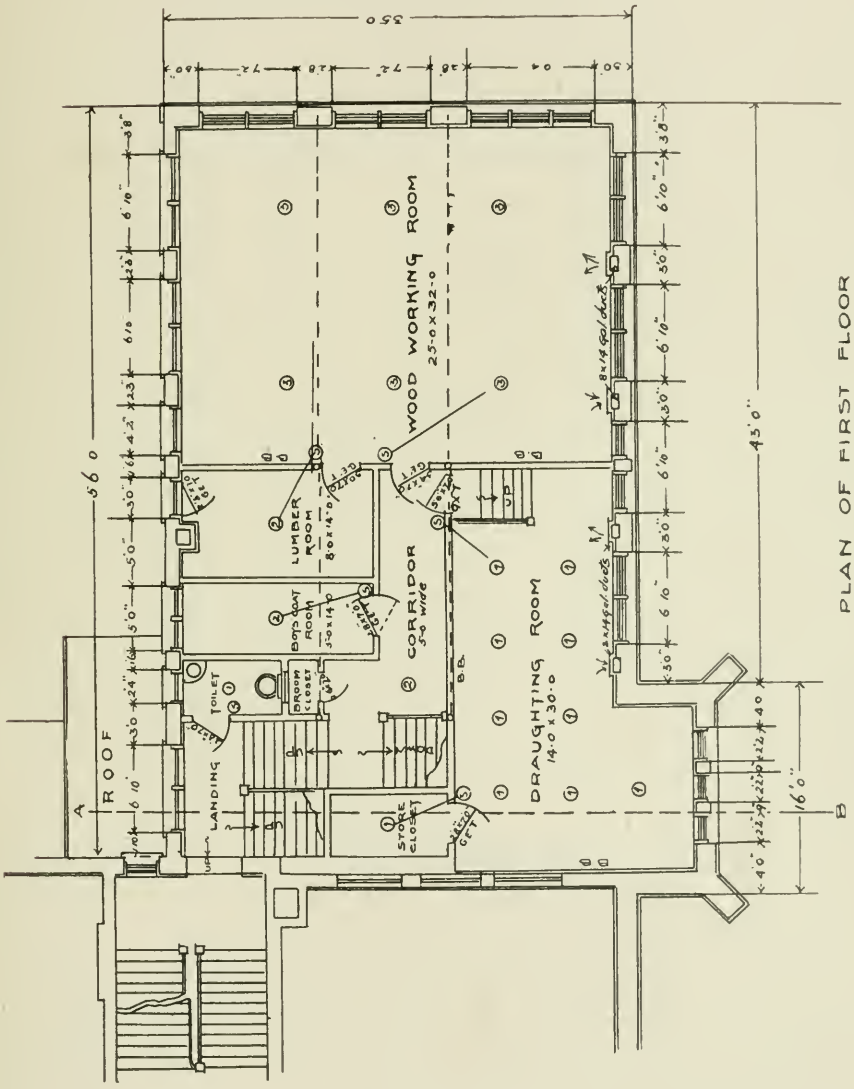
FRONT ELEVATION
Technical School, Sault Ste. Marie.



Technical School, Sault Ste. Marie, Ont.

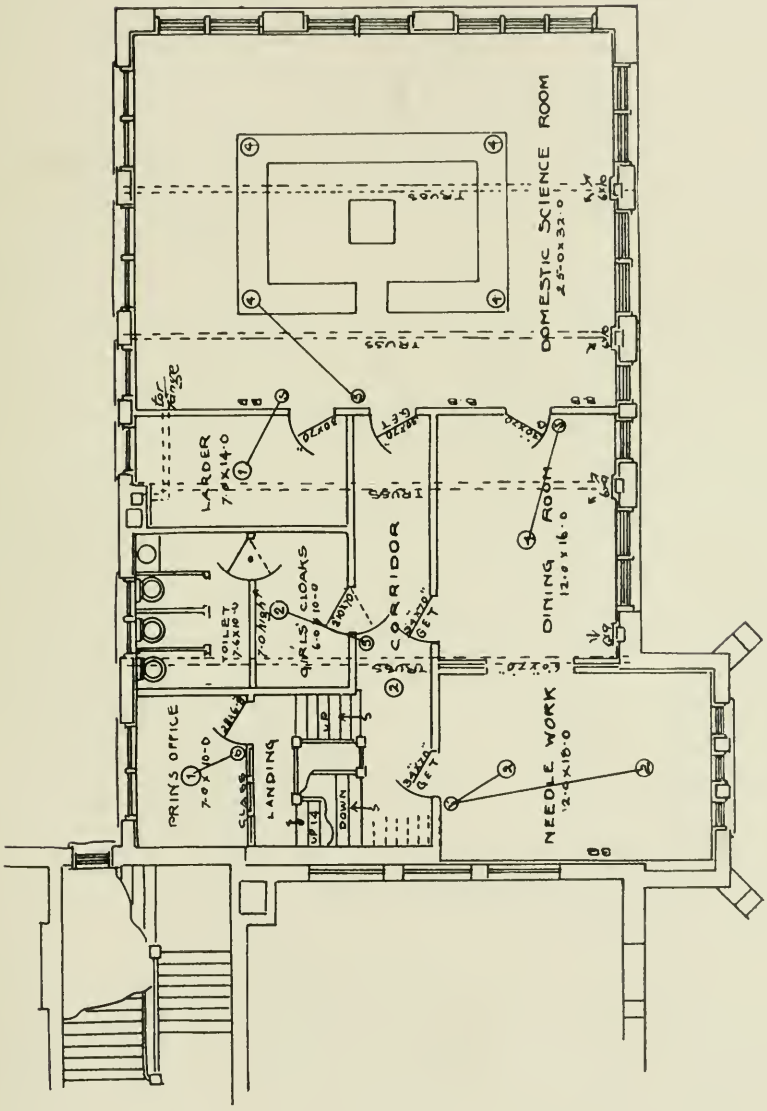


PLAN OF ENTRANCE AND BASEMENT.
SCALE 8 FT = 1 INCH
Technical School, Sault Ste. Marie, Ont.



PLAN OF FIRST FLOOR
SCALE 8FT = 1 INCH.

Technical School, Sault Ste. Marie, Ont.



PLAN OF SECOND FLOOR.
SCALE 8FT = 1INCH.

Technical School, Sault Ste. Marie, Ont.

the purchase of casts and equipment, and for the accumulation of collections for the use of these schools. In 1851-2 these grants amounted to more than $60,000 divided amongst schools in such centres as Manchester, Leeds, Glasgow, Birmingham and Paisley. In every case these grants were added to by generous local appropriations so that is is quite likely that in that year more than three times that sum was spent in the development of this subject. In 1853 the Department of Science and Art was created. In 1856 the Education Department came into being and all educational efforts which up till that time had been under the control and direction of the Board of Trade were transferred to the new department. It is a remarkable fact that all these efforts at art industrial training were organized before attention was paid to elementary education. The first report of this department of practical arts as organized in 1852, states its objects as two in number, both equally important in the industrial progress of a nation:

1. General elementary instruction in art as a branch of national education, among all classes of the community with the view of laying the foundation for correct judgment both in the consumer and the producer of manufactures.

2. Advanced instruction in art with the view of its special cultivation together with the application of the principles of technical art to the improvement of manufactures; also the establishment of museums by which all classes might be induced to investigate those common principles of taste which may be traced in the works of excellence of all ages.

These two objects might still form the working principles of any department or organization devoted to art instruction. In 1857 there were nearly 13,000 students in local art schools, 400 in the national art training school and 44,000 elementary pupils were taught in the ordinary schools, the total number having more than doubled in four years. To encourage the erection of art schools, the Department in 1863 agreed to pay a building grant for these schools and this grant greatly stimulated their creation. In the same year there were also established national scholarships enabling advanced students who intended to become designers, etc., to continue their studies in the Art Training School and Museum at South Kensington. In 1897 the total amount of the national grant equalled more than $1,300,000 and in 1900 the Science and Art Department spent $2,951,930 in addition to what was expended by local authorities. A Boston report says: "Now in every English city one finds a school of art. Thus has arisen that splendid system of art instruction in the cities by technical schools, and by art schools that must be the admiration of every student of the municipal art of to-day in England—that system that is giving to art a popular dignity, unusual in these times, showing it as a necessity, not a luxury, erecting noble buildings for its purpose, and splendidly equipping them; instructing tens of thousands of young people in its principles and so developing talent and and raising the art taste and standard."

In several of our Collegiate Institutes notably Berlin, Kingston and Brantford, advanced courses in mechanical drawing are being taken up with considerable success. Neither workmen nor educators sufficiently understand the importance of mechanical drawing. It is said that if this art were understood by every journeyman in a machine shop the productive efficiency would be increased thiry-three per cent. By enabling workmen to work from a design instead of expensive models this art would save a vast amount of time and money. A manager of an important industry at Worcester, Mass., says that, when a lad, he was one of a class of thirteen who spent all their leisure time studying drawing. Every member of that class attained an important position, either as manufacturer or manager and each

has owed his power to seize the opportunity of advancement to his knowledge of drawing. An excellent feature of the courses above referred to is the "measured drawing" that is, a tool or part of a machine is taken, carefully measured in all its parts and then such drawings are made as would enable the workman to make an exact facsimile.

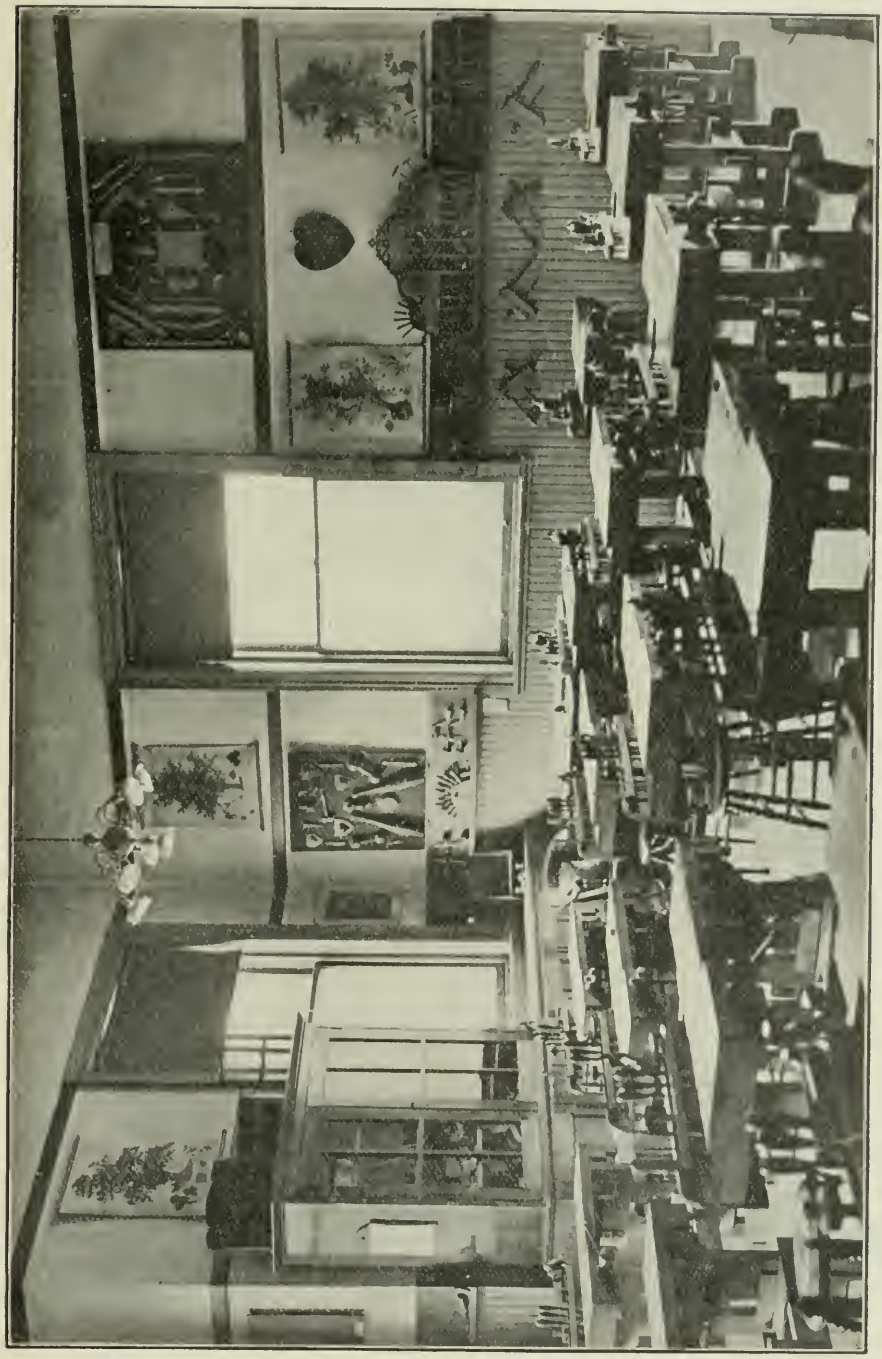
It is difficult to form an adequate conception of the vast importance that is attached to drawing in German technical schools. It is studied in every type of trade or technical institution and indeed some of such schools devote the greater part of their time to the subject—day schools, evening schools, Sunday schools and the result of this is seen to-day in German manufactures. "Made in Germany" is no longer a reproach in the markets of the world as it once was. Every manufacturer employs a number of designers, seemingly to a British mind out of all proportion to the extent of his business.

Drawing consists of many branches and teachers sometimes have difficulty in deciding on the educational and practical value of each. Early in the year 1903, the State Board of Massachusetts issued a circular to instructors and Supervisors of drawing and Superintendents of schools throughout the State asking their opinion on this point. The following table gives a summary of the opinions received.

	At what age best begun.	During what years of most value.	Relative value on scale of 5. 5 highest value.
Free-hand illustration of school work	5	All	4.5
Perspective principles	10–12	All	3.4
Accurate pencil drawing as record of observation and as scientific data	12–14	All	4.5
Animal drawing from life	5	5–8	2.5
Pose drawing	5 and 14	High School	2.5
Study and drawing of type forms	Various replies	.....	3.0
Clay Modelling	5 and 13	5–8, 13–17	2.0
Copying from the flat	All ages	All ages	2.0
Freehand Paper Cutting	5	5–8	3.5
Accurate instrumental drawing	12–13	High School	4.5
Development of surface	10–12	"	4.0
Orthographic Projection	12–14	"	3.0
Historic Ornament	12–14	"	3.0
Manipulation of spots with tracing paper	11–12	All	4.5

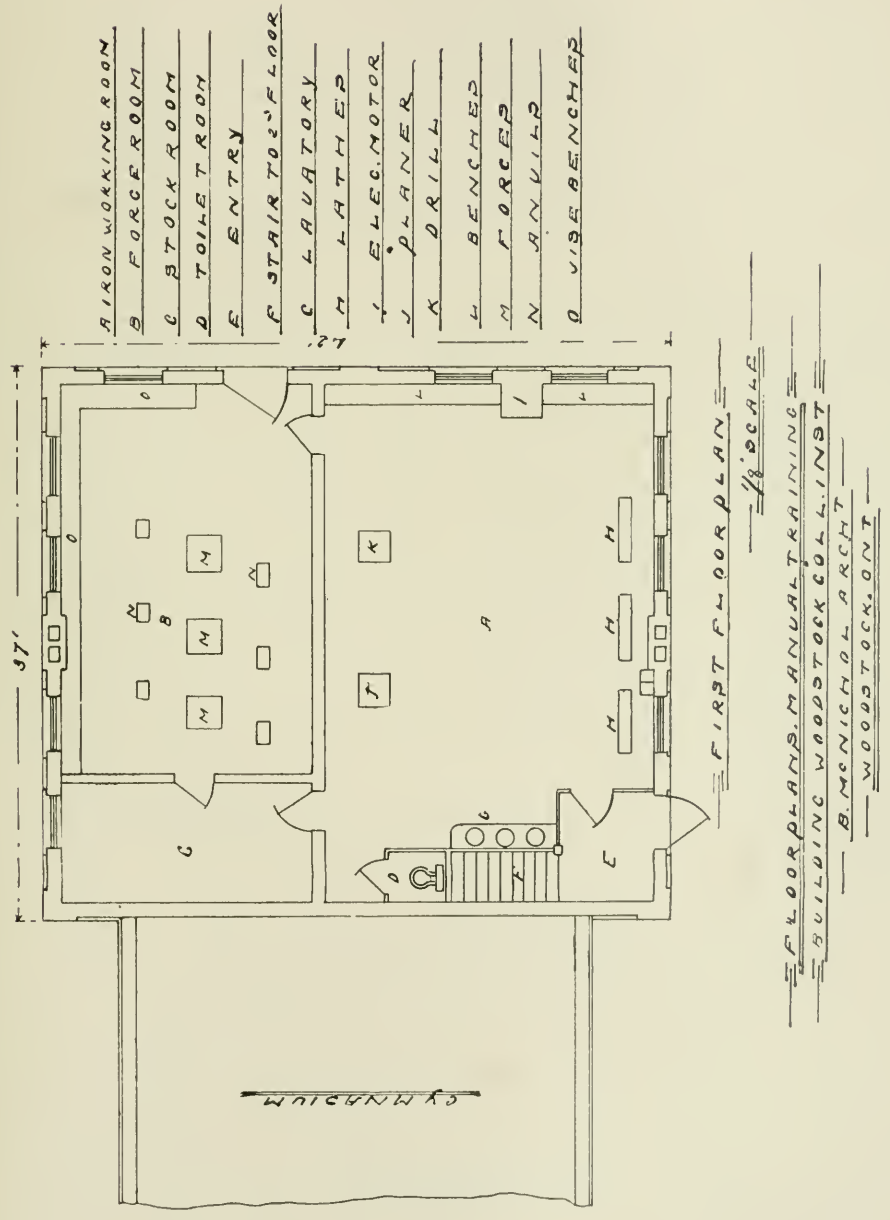
Manual Training.

This subject has made encouraging progress. During the year, new centres have been opened in Galt, and Owen Sound, while an entirely new building has been erected at Woodstock to take the place of the one previously used and plans have been prepared for an up-to-date building at Sault Ste. Marie, for which the material is now being carted. The progress of the work is shown not so much in the additional centres opened, though considering the slow growth of interest in educational affairs in all countries, even that is satisfactory, as in the extension of the work where it has been installed for some time. Where extension takes place in these cases, it shows that manual training is accomplishing what has been claimed for it. The various photographic illustrations scattered throughout this report will show to some extent the character of the work being done, though, of course, material products do not always show the real results of educational effort. In centres



Toronto Normal.

Manual Training Building and Collegiate Institute, Woodstock.


A IRON WORKING ROOM
B FORGE ROOM
C STOCK ROOM
D TOILET ROOM
E ENTRY
F STAIR TO 2ND FLOOR
G LAVATORY
H LATHES
I ELEC. MOTOR
J PLANER
K DRILL
L BENCHES
M FORGES
N ANVILS
O VISE BENCHES
37'
WORKBENCH
FIRST FLOOR PLAN
1/8" SCALE
FLOOR PLANS. MANUAL TRAINING
BUILDING WOODSTOCK COLL. INST
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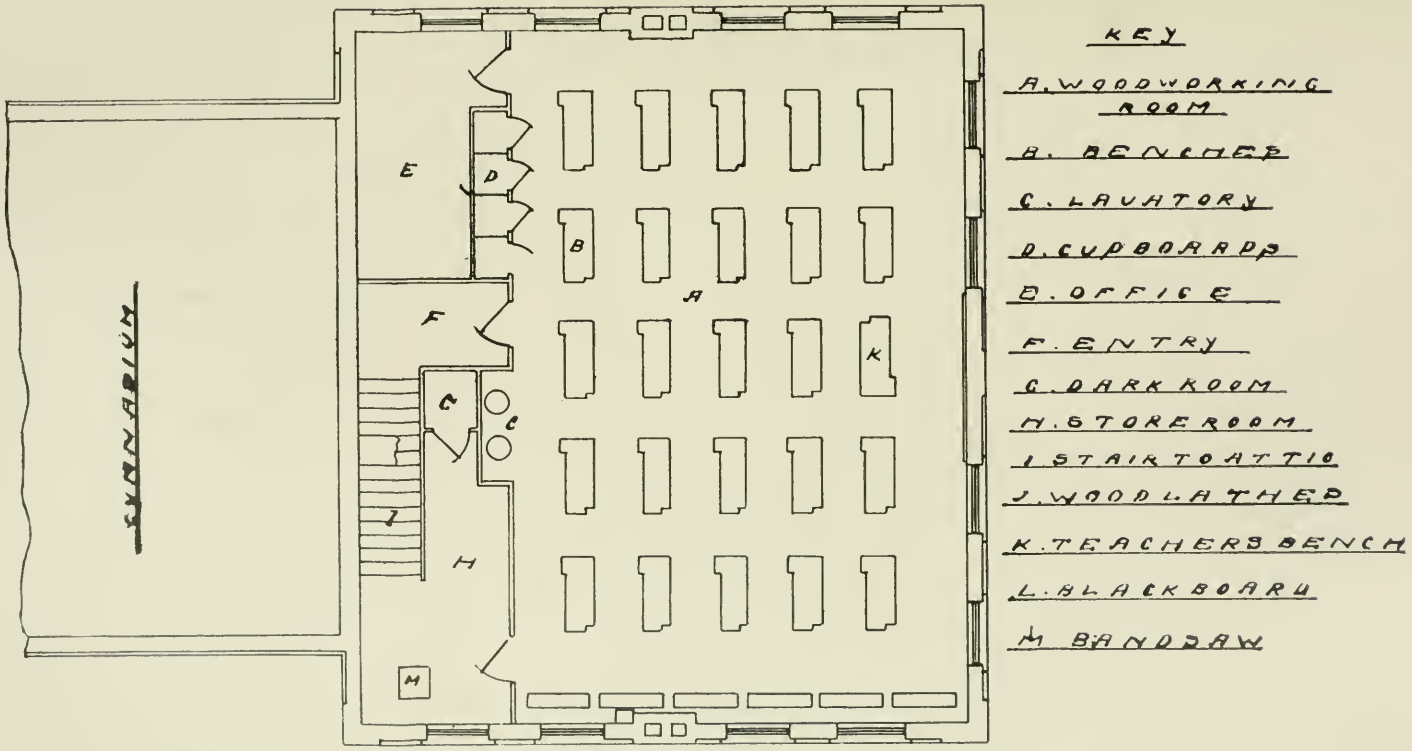


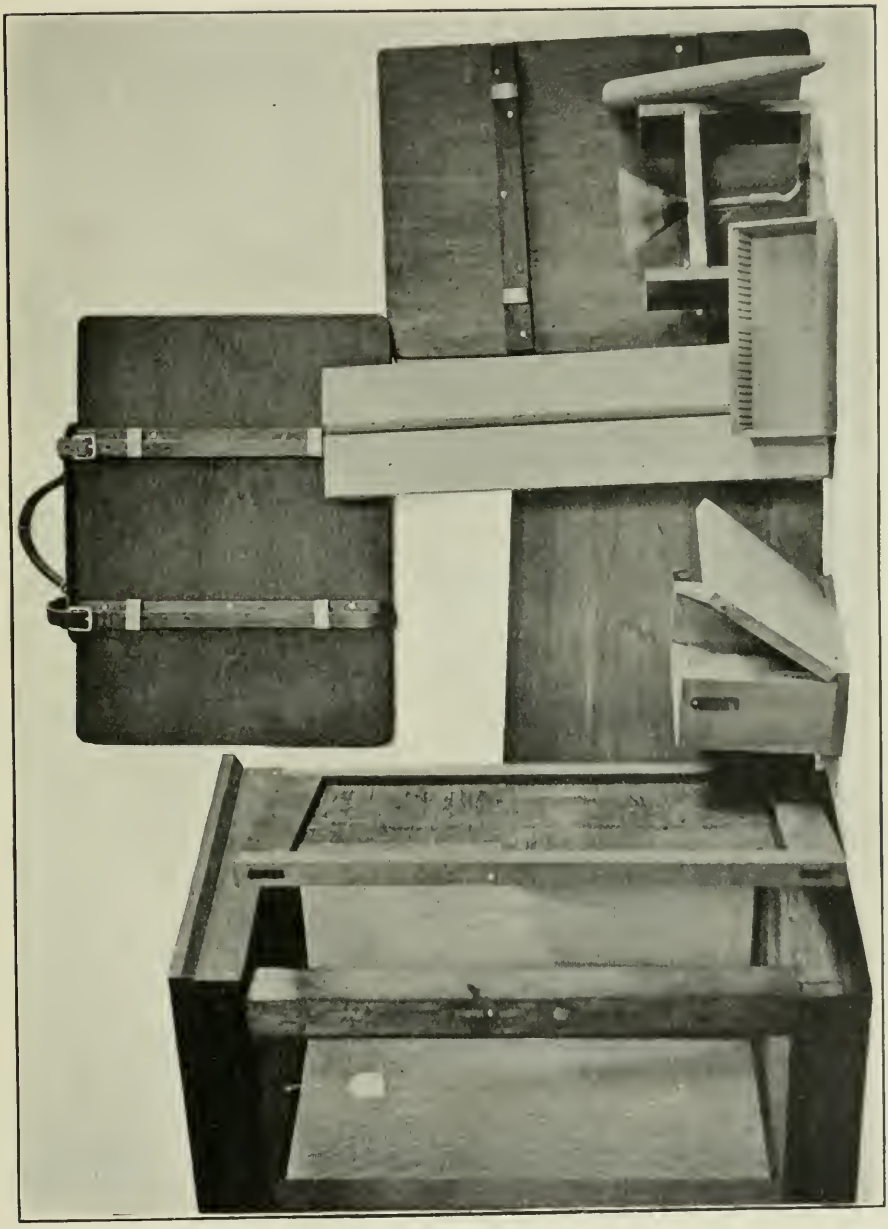
Manual Training Building, Woodstock Collegiate Institute.

such as Berlin, Stratford, Kingston, Woodstock and Brantford, considerable attention is being paid to wood turning and as an experiment at Brockville, a single lathe has been installed to be driven by a water motor. Should this experiment prove successful, as there is every indication that it will, the experience gained will be useful in those places that are not supplied with day power. This work, though considered by some as mechanical and having little educational value, is decidedly beneficial from two aspects; first it gives the boy a knowledge of machines and power and second it has a direct connection with the industries. Some excellent work is being done particularly at Stratford and Woodstock.

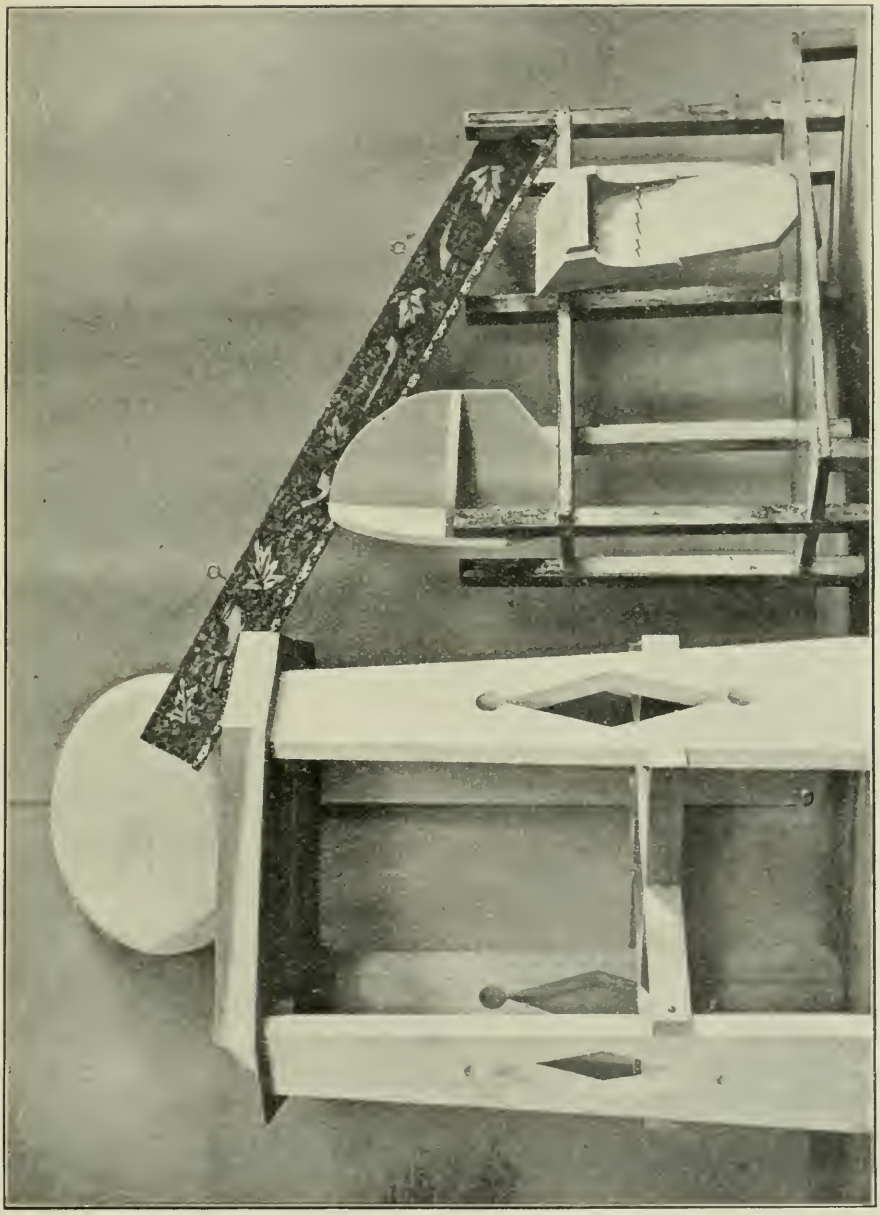
The character of the mechanical drawing throughout is being considerably improved, much more attention is being paid to lettering and a large number of the drawings turned out are decidedly creditable. It has already been mentioned that there is hardly a trade or industry in which mechanical drawing is not of the greatest service, besides having an educational value in training in accuracy and attention, two things in which Huxley says "mankind are more deficient than in any other mental quality." Metal work in various forms is growing in favour. Equipments for forging and machine work are in active and useful operation at Berlin, Brantford, Stratford, Woodstock and Macdonald Institute and by a slight additional equipment to that provided for woodwork much useful work can be done. Ottawa has established a decidedly useful course in copper and brass work. This form of work could very easily with slight additional expense be carried on in every place that possesses a wood working equipment. Reference was made to this course last year and I am now able to give two photographs which show the character of the work being done. On many occasions the Department has been asked for a list of the equipment necessary for carrying on manual training in wood and brass and copper. In the hope that such a list may be useful to Boards desiring to introduce the work, the equipment provided by the Ottawa School Board, for its fifteen centres is given. With these tools all public and high school woodwork can be effectively carried on and, where expense has to be considered before efficiency, could be reduced, though this is not recommended.

20	Manual Training Benches	$175 00
20	Bench hooks	5 00
20	Springfield Drawing Kits	10 00
20	Pencil compasses	3 00
20	Drawing Rules, 12 inches long, inches and centimeters	3 75
20	Bench Whisks	1 65
20	Marking Gauges, No. 64½	5 25
20	Try Squares, No. 12, 6 inches	5 00
20	Jack Planes, Bailey No 27	31 40
20	Firmer Chisels, plain, 1 inch and handles, Spear and Jackson's B. E. (Octagon handles)	4 80
20	Firmer Chisels, plain, ½ inch and handles, Spear and Jackson's B. E.	4 09
20	Firmer Chisels, plain, ¼ inch and handles, Spear and Jackson's Square Edge	2 42
20	Maple Leaf Back Saws, 10 inches, 16 teeth to 1 inch	18 34
4	Smooth Planes, Bailey No. 3	7 80
4	Try Squares, No. 12, 12 inches, Stanley	2 07
1	Diston Improved Mitre Box, and Saw 22 inches, 11 teeth to 1 inch	11 30
2	File Cards and Brushes, Nicholson	50
6	Screw Drivers, round, 3 inches, Sargent	2 06

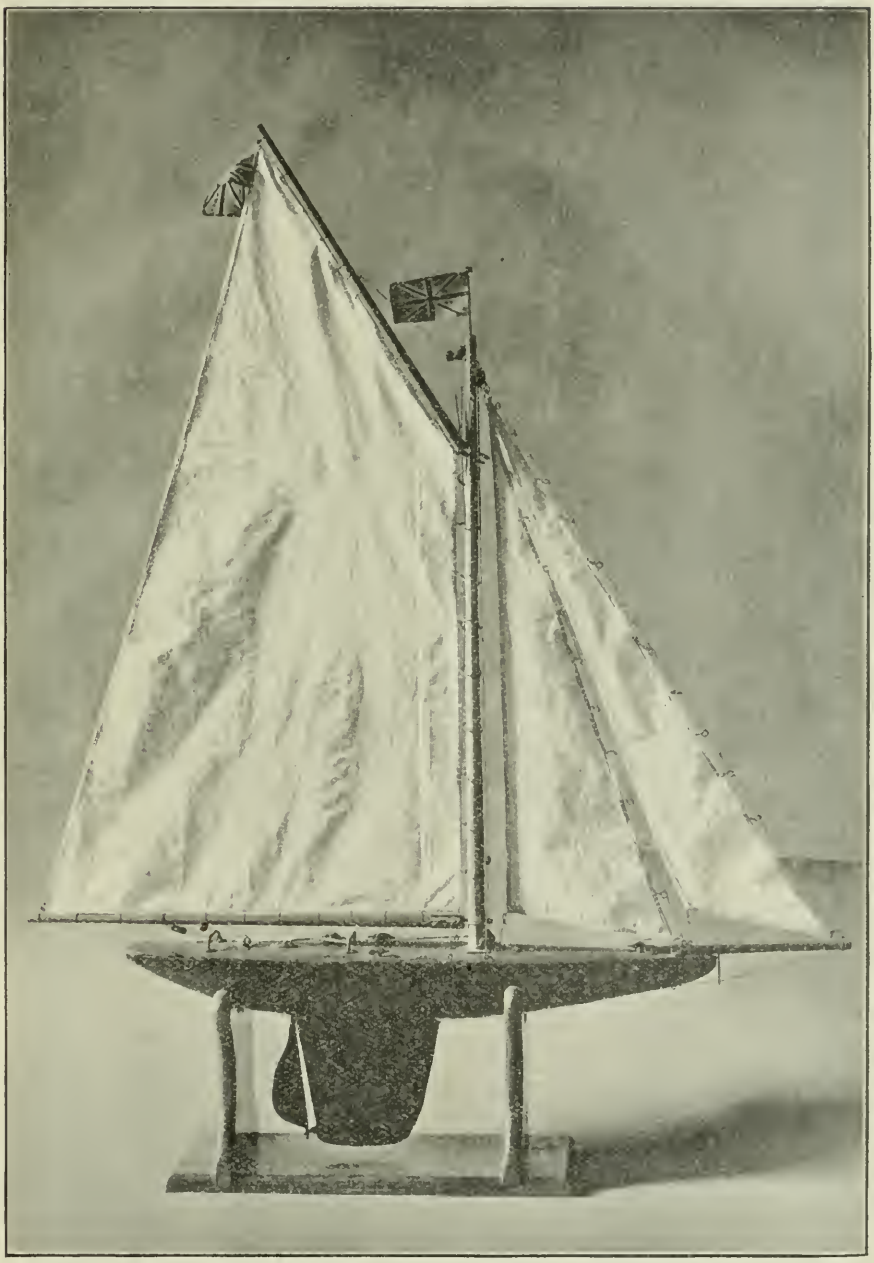
2	Screw Drivers, round, 6 inches, Sargent	$0 40
6	Half Round Files, handled, 8 inches	85
6	Flat Files, handled, 8 inches	68
1	Saw File, 4 inches and handled	10
4	Miller's Falls Braces, N.P. No. 14 x 6 inches sweep	4 40
2	Centre Bits, 1⅛ inch, Bokers	24
2	" 1 "	24
2	" ¾ "	20
2	" ½ "	20
2	" ¼ "	16
2	Irwin Auger Bits ¼ inch	40
2	Irwin Auger Bits 3-8 inches	40
2	Irwin Auger Bits 5-8 inches	57
2	Countersinks, metal, Bokers	10
2	" wood Bokers, 651 F.	10
1	Iron Rabbet Plane, No. 78, Stanley	1 48
1	Jointer Plane, Stanley, No. 7	3 40
4	Gimlets, assorted sizes, Marple's	20
6	Brad Awls, handled, fine size, Kent's	25
4	Steel Scrapers, convex, 2 inches wide	80
10	Mallets, hicory, round heads	2 50
2	Firmer Chisels, 1-16 inch handled, Spear and Jackson's square edge	30
2	Firmer Chisels, ⅛ inch, handled, Spear and Jackson's square edge	30
2	Firmer Chisels, ¾ inch, handled, Spear and Jackson's square edge	50
2	Bevels, 8 inch, sliding No. 25, Stanley, N.P.	55
2	Mortice gauges	1 20
4	Nail Sets, knurled, Starret's	30
10	Iron Spoke Shaves, No. 64, Stanley	1 34
2	Wood Hand Screws, No. 812, 10 inches	71
4	Iron Malleable Clamps, 4 inches	94
2	Washita Oil Stones, mounted, 8 inches, Pike's	1 40
2	Washita R. E., Slips for gouges, Pike's	10
1	Brass Oil can No. 22	15
2	Pair Pincers 6 inches, No. 1,076½ Stubb's	30
5	Pair Wing Dividers, 5 inches, Stubb's	1 05
1	Pair Cutting Pliers, side, 9,041A 5 inches, Stubb's	34
1	Pair Round Nosed Pliers, 5 inches, Stubb's	20
10	Maydole Hammers, 13 oz. No. 2	6 25
2	Firmer Gouges 1⅛ inches and handles, octagon, boxwood	50
2	" ½ " " " "	34
2	" ¾ " in cannell "	46
2	" ½ " in cannell "	42
4	Bent C Tools 1 inch and handles, octagon boxwood	1 20
4	" " ¾ " " "	1 20
1	Hatchet, Smart	35
1	Pad Saw No. 5	20
2	Turning Saws 10 inches, Marple's	1 80
2	" 12 " "	1 80
4	Cross Cut Saws, 22 inches, Maple Leaf	4 40
4	Rip Saws, 22 inches, Maple Leaf	4 40
1	Cupboard, divided into compartments, made in white ash polished	49 45



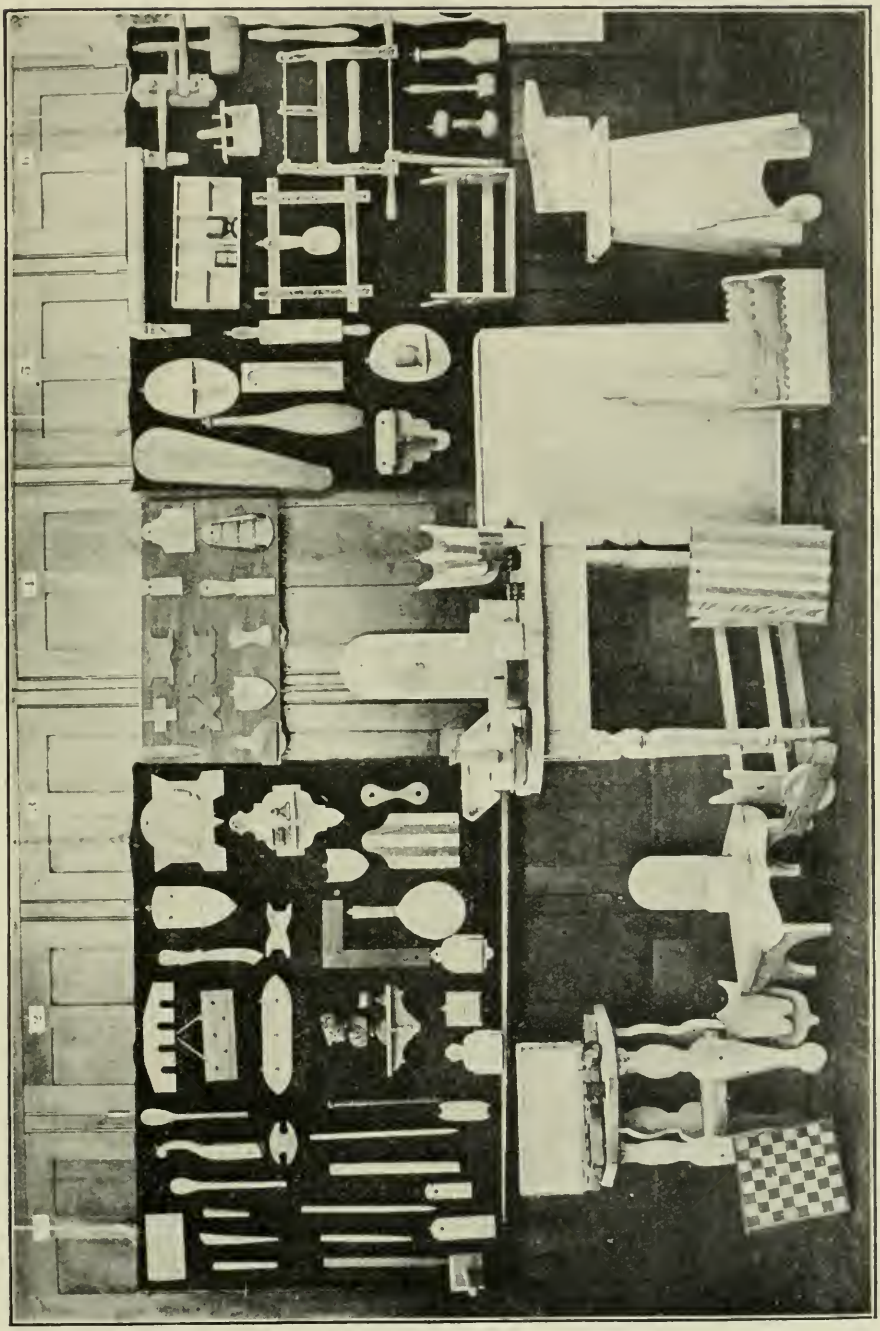
Nature Study, Apparatus Made by Students of Toronto Normal School.



Woodwork. Toronto Model School.



Boat made at Toronto Model School.



Woodwork, Stratford Manual Training School.

1	Cupboard, lower part fitted with drawers, upper part with glass panelled doors made in white ash polished	$ 49 45
1	Black Board T square, 2 set squares and compasses	4 00
1	Saw Bench	2 00
1	Tool grinder	4 00
1	Teacher's desk and chair	10 00
	Tool Racks	
		$463 00

Additional Equipment required for Sheet Copper work.

6	Copper work hammers	7 50
2	Pair Tinsmith snips	2 50
1	Set of 12 chasing tools	2 00
1	Pair Blacksmith's tongs 22 inches	75
1	Set Needle files	1 35
1	Jeweler's saw	75
		$14 85

The teachers engaged in this work are with one or two exceptions enthusiastic and efficient. The amount of time put in, is not measured by the clock. I entered one school after four o'clock and found every bench occupied and was informed that there were not enough benches to accommodate all the boys who wished to work after the regular school hours. The boys are not only anxious and willing to work in school after hours but when dismissed by a tired and hungry teacher carry their work home to be finished. I have heard of many instances of parents procuring them a bench and a small kit of tools and of a number of others where boys have rigged themselves a bench, buying tools gradually and constantly using them for the manufacture of some article required in the house or for the purpose of effecting small repairs. Up to the present the chief work carried on has been that of "making." We seem to have forgotten that "mending" is sometimes as important. In many cases as much or more educational and practical benefit is to be obtained from mending an object as making it. Articles, that are broken at home, should be allowed to be brought to the manual training room to be repaired by the boy, if he is capable of doing the work satisfactorily.

A number of our teachers go to considerable personal expense for literature relating to their work and in attending courses for the purpose of taking advanced work during the summer. During the last midsummer vacation two of our teachers went to New York, one to Cornell University and a number to Macdonald Institute, while in addition many of them are working at the lathe, forge, and in the machine shop, every spare minute they can get in order to obtain practical shop experience. When we have teachers of this type there is no fear as to the success of the work. This spirit is worthy of the highest commendation and the various educational authorities in the Province might reasonably consider the advisability of paying all or part of their travelling expenses when engaged on such work as the students under the charge of these teachers will reap the direct advantage and not the men themselves, though they of course, receive that broader outlook and wider vision which post-graduate courses always give. There should be organized amongst the manual training and household science teachers in the Province a system of interchange of visits to each others schools. These teachers no

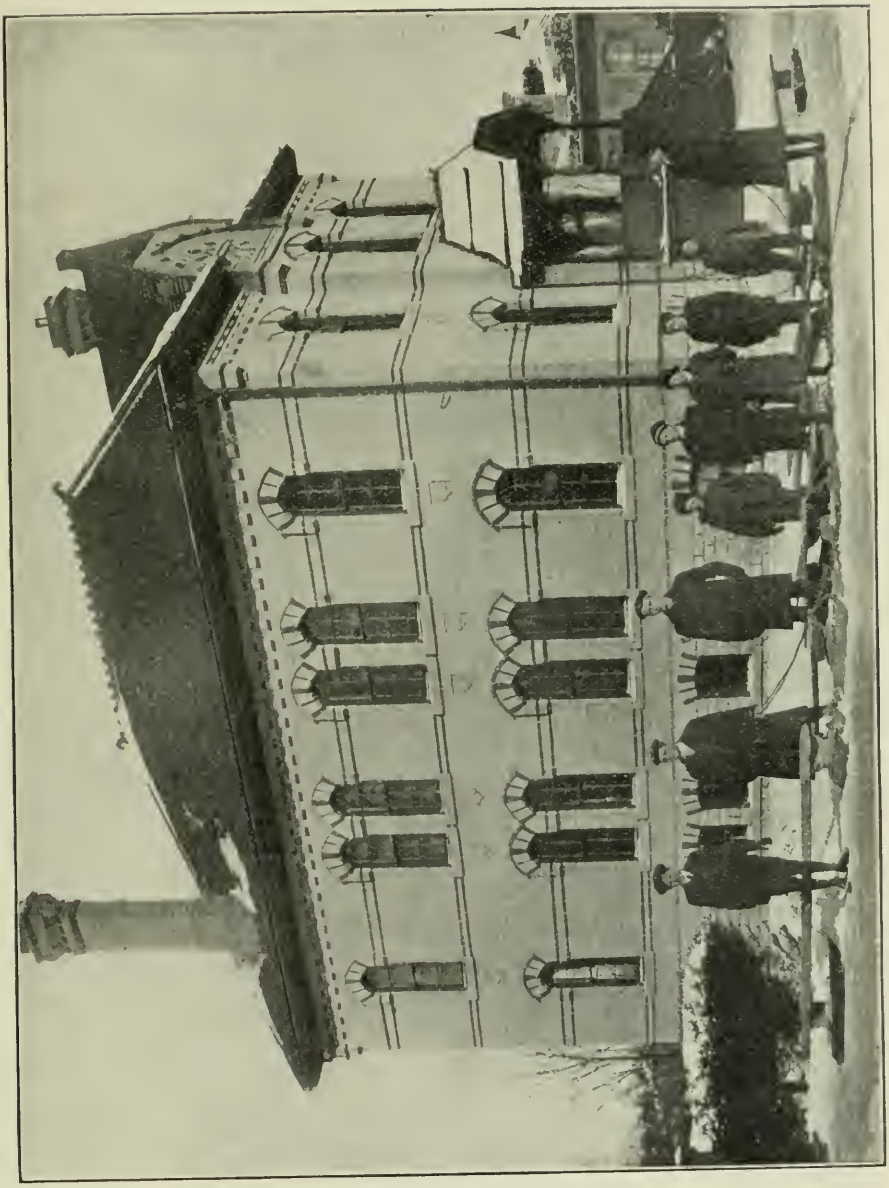
less than others, when pent in one room five days a week, are apt to become narrow and wrapt up in the particular kind of work they are doing and their own way of doing it. There is not a manual training or household science room where some help could not be gathered, some hint picked up that would throw new light upon an old subject, or perhaps present an entirely new subject for consideration and experiment. This could only be carried out by Boards allowing their teachers one or two days each term for this purpose, which time would of course have to be while the schools were in session.

We have in our manual training the same perpetual conflict between accuracy and individuality that we have in our art training. We have not yet learned to combine the two. Some teachers unfortunately think that, if a boy turns out a piece of original (?) work, the originalty, like charity, covers a multitude of sins, that it atones for incorrect measurement, faulty execution and bad design. This question is receiving much attention amongst educators on the other side. There, in the opinion of many of their foremost authorities, "free expression" has run riot and is doing much to hinder the efficiency of the work. This idea is well expressed in the December number of the Manual Training Magazine and as it is exceedingly pertinent to our present situation I do not hesitate to quote it in full: "The formal school arts work of a few years ago had at least the virtue of demanding of the pupil a high order of skill in execution. In the transition from this formal work to a freer expression, the tendency has been to discredit skillfully executed work and to lay all the stress upon the originality of the thought involved. The early work carried the demand for skill to the extreme; in the later work skill has been overshadowed by the emphasis given to originality. The result is that freedom often becomes license and our school arts departments are responsible for an appalling amount of work that is poor in design and atrocious in execution. Such a situation has no parallel in other school subjects. In every department of work, originality is emphasized, but the best expression of which the pupils is capable is demanded. In number work absolute accuracy is the standard. In penmanship, neatness and legibility are insisted upon. In spelling, reading, grammar and language, the pupils are urged to the highest possible degree of attainment. Criticism, correction, suggestion, every device of the skillful teacher is used to inspire him to the highest ideals The capacity of the teacher is very largely measured by the standard of ability to lead the pupils to thoughtful, accurate, methodical expression. Loose, careless unsystematic methods are always the mark of the inefficient teacher, and their results are always manifest in the pupil.

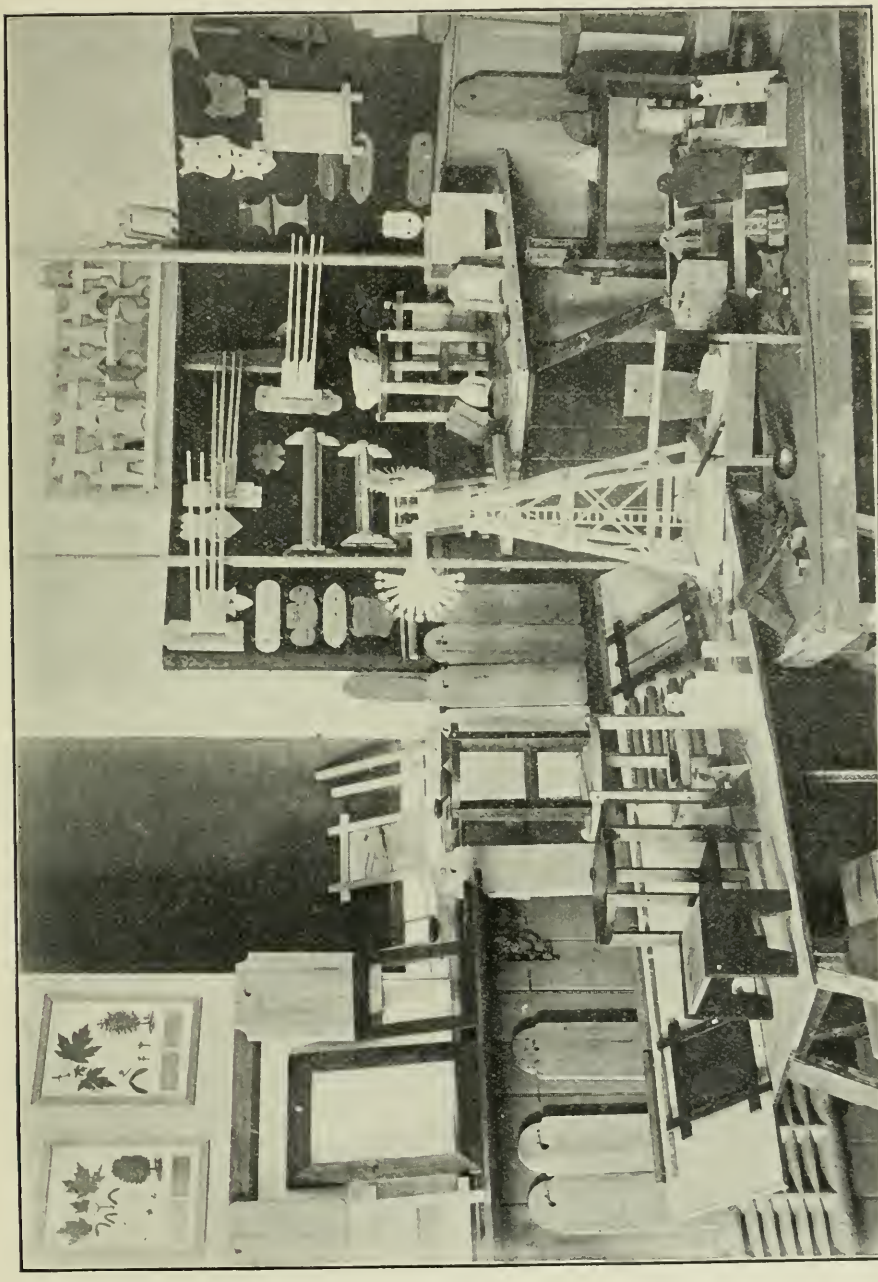
It is claimed by extreme advocates of free expression that interest is diminished by insistence upon careful execution. As a matter of fact the pupil feels the deepest interest in his work only when the result is good and satisfying to himself and this interest is increased as he realizes a growth of power to express himself with greater skill. Interest and originality are vital factors in the development of the child, but they reach their greatest possibilities only when thoughtfully directed towards high standards. Undirected or misdirected, they lead to thoughtless, careless, slovenly habits in expression and in living.

Aside from the purely educational aspect of the question is a hardly less important practical reason for development in skill, particularly in the higher grades: the great industrial problems of the day are rapidly becoming a matter of serious concern to educators, and there is a persistent demand for practical results from the public schools.

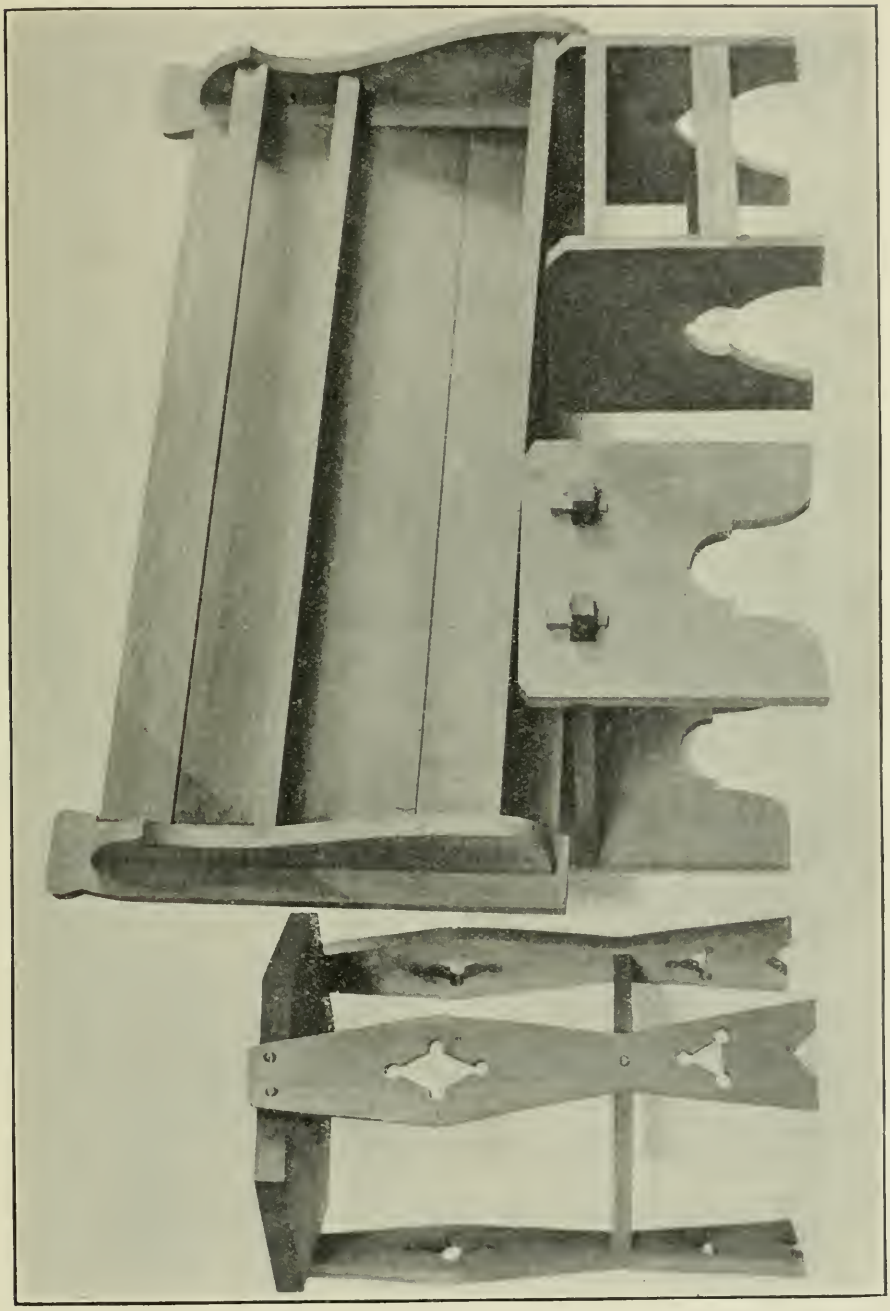
Pedagogically there is no warrant for a distinction between school arts and other school subjects. The standard by which all of the work of the



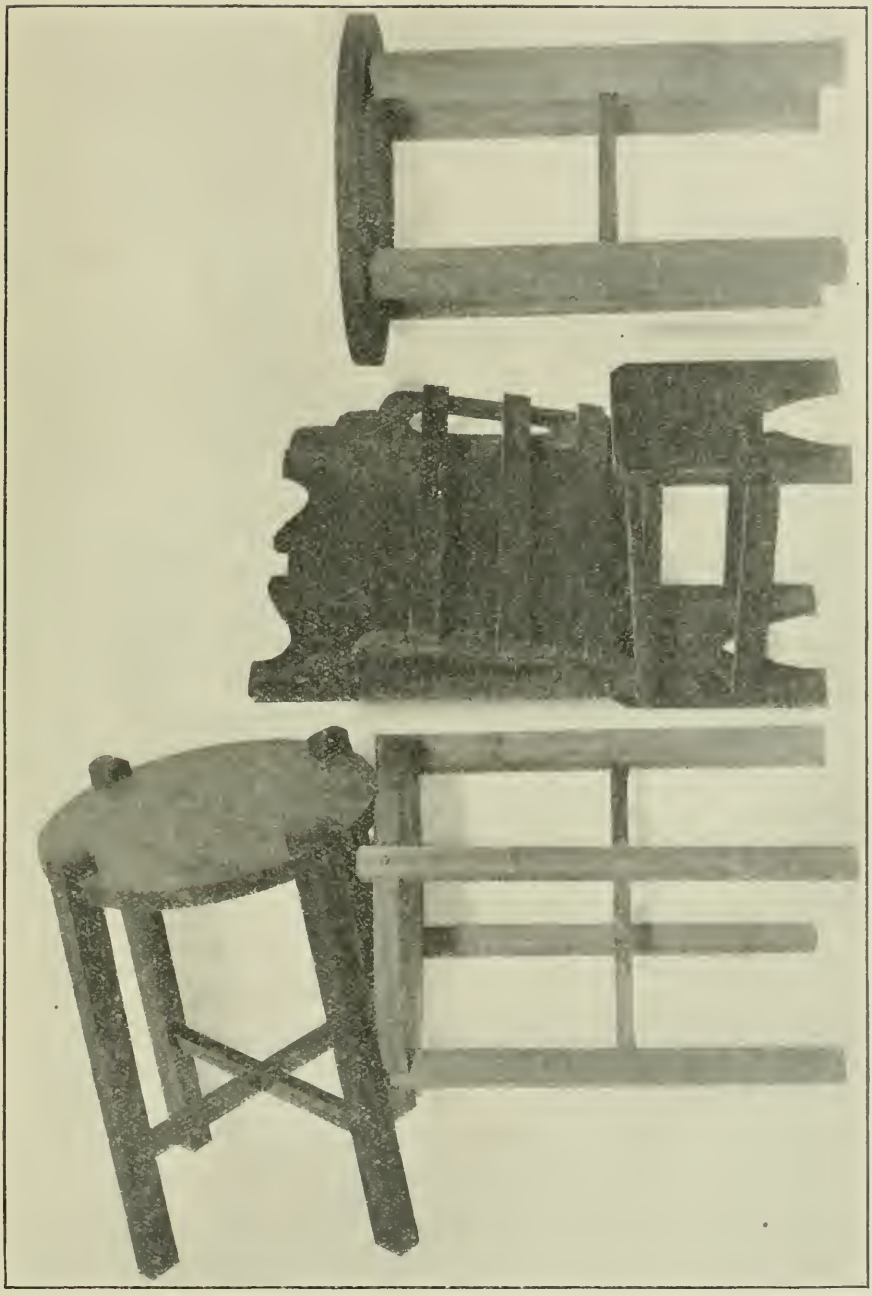
Stratford Manual Training and Household Science Building. Sleds made by boys



Work at Guelph Central School.



Work of Toronto Model School Boys.



Work of Toronto Model School Boys.

pupil should be measured is the best that he is capable of doing. His thought should have his best expression or it fails of its highest possible influence on his character"

The character of the rooms being used for manual instruction is being considerably improved. The day has almost, but not quite, gone when it was thought that an ill-lighted, badly ventilated, and insufficiently heated basement was almost too good for this purpose. The suitability and general appearance of the rooms are receiving more and more attention and the conclusion is being slowly reached that manual training requires a room as well lighted, heated and ventilated as those that are set aside for ordinary class work. In addition to the suitability of the rooms as such attention is being paid to their proper adornment. It must always be remembered that a manual training room has two functions to perform—that of the class room and that of the workshop. The material available for this purpose,—material that has a direct reference to the work in hand—is to be found in abundance. Processes of manufacture, specimens of woods, leaves, etc., samples of work, drawings, blue prints, photographs may all be used effectively. A plan is shown of a wall decoration in one of the rooms in Ottawa.

Much good has been done by school fairs and exhibitions in various parts of the Province. In Guelph, the exhibition authorities offer a large sum annually in prizes for boys and girls in the public schools. On these occasions a large number of prizes are always carried off by boys and girls from the manual training and household science classes. At Stratford, one of the schools is fitted up as an exhibition, each room being devoted to some special subject or grade,—one to manual training and household science. At the annual exhibitions in Toronto and Ottawa, space is allotted for an exhibition of work; a corner is fitted up as a class room and demonstrations are given daily of the procedure of the ordinary manual training room. These exhibitions and demonstrations invariably draw large and interested crowds, and in this connection I should like to see established a permanent educational building in connection with the Toronto Exhibition. Such a building should show typical work of the grades throughout the Province, while classes in various subjects could be actually at work in the various subjects. This has been referred to in previous reports. It is certain that nothing would do more to stimulate interest in what after all is the chief business of the State,—education. Probably the greatest educational exhibition ever held was that at the Louisiana Purchase Exposition. It was on a scale far surpassing in magnitude any other similar exhibition. Nearly every nation on the face of the earth contributed material to illustrate the different phases of education and it embraced every known agency employed in educational effort. It covered an area of seven acres and it does seem to me that the Toronto Exhibition will be incomplete and lacking in nationality and effectiveness as an educational organization until a large building is devoted exclusively to showing the educational facilities and productions of the whole Dominion.

During the year we have had visits from many English teachers sent out under the auspices of the Mosely Commission. I had the pleasure of showing those interested, the work we are doing, and describing to them our system of grants and organization. Though they stated, they had not come to criticize, but to learn, the majority expressed themselves as delighted with what they saw. These expressions, may of course, only have been merely the polite things that visitors are sometimes expected to say. One of the reports of these teachers, just to hand, in referring to our work, writes as follows "At Guelph, a very enterprising and devoted Manual Instructor

is working. He is endeavouring to bring from forest and field around the school, materials for hand and eye work; the boys co-operating in these investigations. By these means, he is getting together an increasing variety of local woods, and at the time when we were there, he was busy experimenting with a stick from a tree, from which he was producing a fine fibrous material, which had every appearance of making an excellent weaving material. At Toronto, under the guidance of Mr. Leake, I visited the Normal Training College, at which College there is a Manual Training Normal School. The workshops are well equipped, but the methodical and pleasing arrangement of everything impressed me the most; verily the environment in this school has been studied and arranged that it may silently but most powerfully influence the teachers in training. Professor Wilkinson is in charge here and appeared to be an exceptionally capable and enthusiastic teacher. The first year's course consists of twenty-nine lessons of one and a half hours per week, practical work, and is arranged more particularly for those teachers who will eventually go out into country districts. The twenty-nine lessons are divided into clay modelling, six lessons; paper and cardboard work, six lessons; basketry, seven lessons; and woodwork, ten lessons. In addition to this, raffia and weaving lessons are given. In each kind of work the student prepares an original model and the Manual Training work is closely correlated to the other college subjects, and an endeavour is made to impress upon the students the desirability of adapting their Manual Training work to use the local materials at their hand, as most of them go into very rural districts. The Normal Manual Training school known as the MacDonald Institute, came in for a large share of my attention. Here Professor Evans, who had conducted me over the whole of the buildings, increased still further my obligations to him by explaining at some length the scheme of Manual Training taken by the teachers here in training. All the different forms of handwork are taken and closely intertwined with the other subjects of study. Originality and the adaptation of the models to the local provisions of nature are very prominent features, even to getting colours direct from flower petals. The normal students have six original models to make of each kind of material studied." As a result of his visit Mr. Baily makes the following suggestions to the English Educational authorities.

"1. That our (English) regulations and codes should be more elastic, giving authorities and teachers freedom to adapt the schoolwork to the needs and capabilities of the child and of the district in which the child lives.

"2. That constructive work 'learning by doing' should be taken by every child uninterruptedly throughout its school career and should be intimately correlated to the other subjects taken.

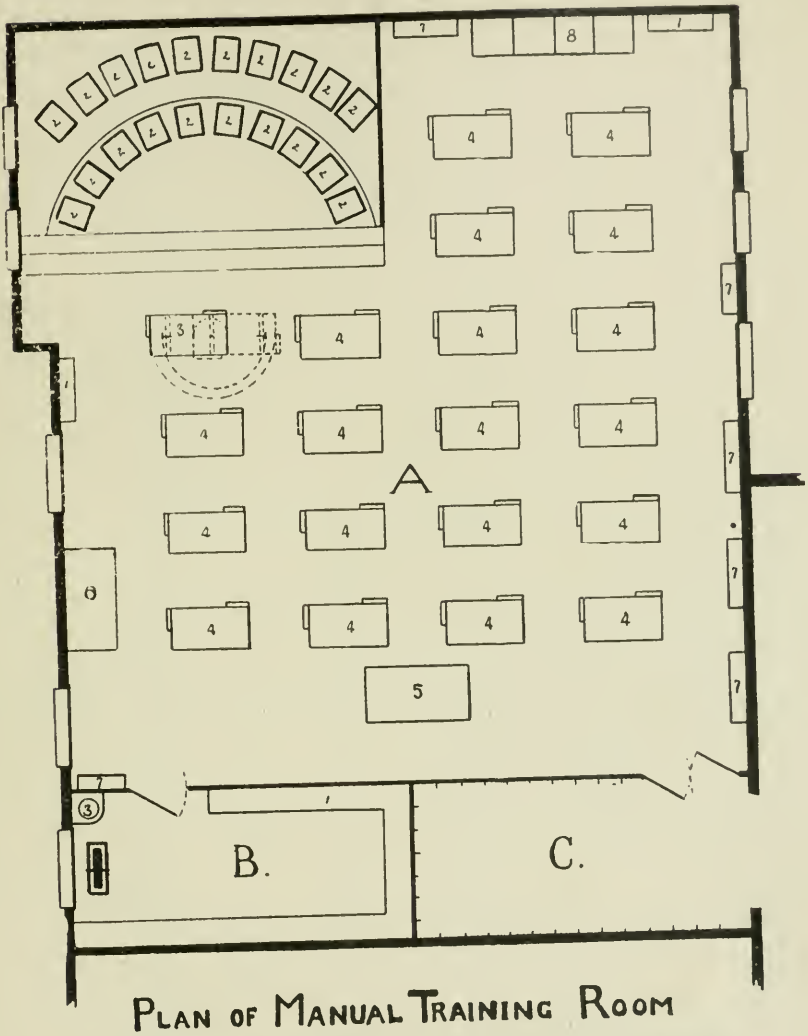
"3. That a more complete and efficient training should be taken by every teacher of constructive work (more commonly called Handicraft or Manual Training) previous to their teaching the subjects.

"4. That it would conduce to efficiency to further in every possible way the co-operation of public libraries, chambers of commerce, employers and labour associations, etc."

Though progress has been made, much yet remains to be done. There are still thirteen towns in the Province of over 5,000 population where there is neither manual training nor household science. These towns are London (has household science in the Collegiate Institute), Windsor, Peterborough, Belleville (has household science) Chatham, Sarnia, Sault Ste. Marie (building to be erected), Lindsay, Toronto Junction, Barrie, Collingwood, Pembroke,

Lamp Made by Commercial Class, Ottawa. Presented to Dr. Glashen, Public School Inspector.

Copper Work. Ottawa Public Schools.



PLAN OF MANUAL TRAINING ROOM

GREIGHTON STREET PUBLIC SCHOOL, OTTAWA.

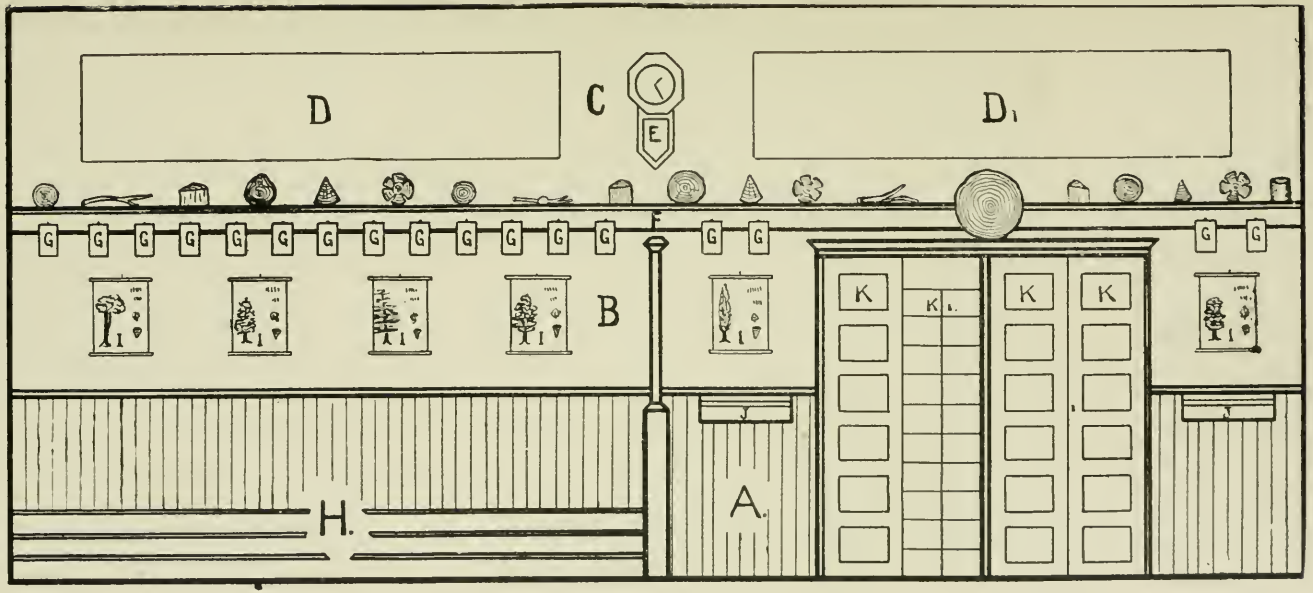
A. Classroom 29 6' x 33'
1. Demonstration Gallery
2. Chairs
3. Reversible bench (as shown) for demonstration purposes.

B Woodroom 14 6' x 6' 9"
1 Shelves for lumber.
2 Grindstone

C Cloakroom 14' 6" x 6' 9"

4 Benches
5 Desk
6 Case for finished work.
7. Racks for general tools.
8. Lockers for boy's work.

3 Washstand



NORTH WALL MANUAL TRAINING ROOM, CREIGHTON ST. PUBLIC SCHOOL, OTTAWA.

SHOWING SCHEME OF DECORATION.

A. Wainscot.
B. Burlap.
C. Tinted Wall.
D Motto "Mastery for Service.
D1. Motto "Learn by Doing."
E. Clock.
F. Shelf for sections of wood, etc..
G. Dressed Specimens of wood
H. Demonstration gallery - seated with 20 chairs
I. Tree charts
J. Tool racks
K. Lockers for pupils work
K1. Interior of locker; Showing subdivisions, sufficient for one class of 20 pupils

and Smith's Falls. It is to be hoped that the educational authorities of these places will seriously consider the question of their introduction and not allow themselves to be outdistanced by other municipalities.

In closing this section of my report, I should like again to point out the urgent necessity that still exists of something being done to train teachers for this important work. The same scarcity of teachers as was noted last year is still evident, and unless something be done the progress of the work is sure to be materally hindered. The means to be taken have previously been fully outlined.

Household Science.

The subject includes all that concerns the home and does not, as has been pointed out on many previous occasions, means cookery only. Reference has also been made to the importance and advantages of needlework. In several centres one term is taken from cookery and devoted to this work.

I am glad to be able to report that a much broader view of the whole subject is being taken, though, of course in the limited time at the disposal of the teacher, a wise selection has to be made of the branches that can be touched upon. Centres have been opened during the year at Galt and Owen Sound and both have made an excellent beginning under capable teachers, while in Ottawa, a Committee of the Public School Board has reported favourably on the opening or four or five centres in that city. At Brockville and Owen Sound evening classes have been running with marked success and from conversation with members of the Kingston Board of Education, I gather that the advisability and possibility of organizing an afternoon class for the mothers is being considered. A movement of this character would be a decided benefit, for not only would it benefit the mothers individually, but it would make much more real and intense that connection between the home and the school that we are all striving after. Much more attention is being paid than formerly to the preparation of the complete meal. At Stratford the refreshments served at the School Exhibition were prepared and served by the girls from the household science classes, while at Brantford, Ottawa and Toronto, luncheons for public ceremonies have been cooked and served by the girls receiving instruction, with pleasing success, and in many other cases luncheons have been served to members of the different Boards. In all these cases the cost is carefully calculated, and all the operations, from purchasing to serving, performed by the girls. Even where meals of this character cannot be prepared attention should be given to properly setting a table, though the training obtained by a girl in serving a meal can be obtained in no other way.

On the occasion of the visit of the Minister and the Deputy Minister of Education to open a new public school at Brantford, the cooking and serving of the meal was entirely under the control of the household science classes. A copy of the menu on that occasion is shown.

At Berlin the girls make use of their knowledge and ability in serving light refreshments to those students who stay to lunch and the advisability is being considered of organizing a regular lunch department in connection with the Household Science classes. On their present venture a small profit has been made and this has been used to assist other school activities.

Various departments of the work can be helped by the boys in the manual training classes. In Queen Alexandra school, Toronto, the boys have made a model bedstead which is used by the Household Science teacher in demonstrating the proper method of making a bed. In other schools cabinets have

ALEXANDRA SCHOOL.

Menu

OYSTERS (RAW) SALTED WAFERS

CONSOMME AUX PATES

VEAL CUTLETS TOMATO SAUCE

MASHED POTATOES FRENCH PEAS

WALDORF SALAD CHEESE STRAWS

CANTELOUPE ICE CREAM

FRUIT

COFFEE SALTED ALMONDS

MENU CARD AND TOAST LIST USED BY THE HOUSEHOLD SCIENCE

Toast List

"THE KING" . . . PROPOSED BY THE CHAIRMAN

ORCHESTRA—GOD SAVE THE KING.

"EDUCATIONAL INTERESTS OF ONTARIO"

PROPOSED BY J. P. HOAG, B.A., INSPECTOR

RESPONSE BY HON. DR. PYNE

"CANADA" . . . . PROPOSED BY MAYOR BOWLBY

RESPONSE BY HON. WM. PATERSON

"ONTARIO" . . . . PROPOSED BY JUDGE HARDY

RESPONSE BY T. H. PRESTON, M.P.P.

AND J. H. FISHER, M.P.P.

HURON STREET SCHOOL

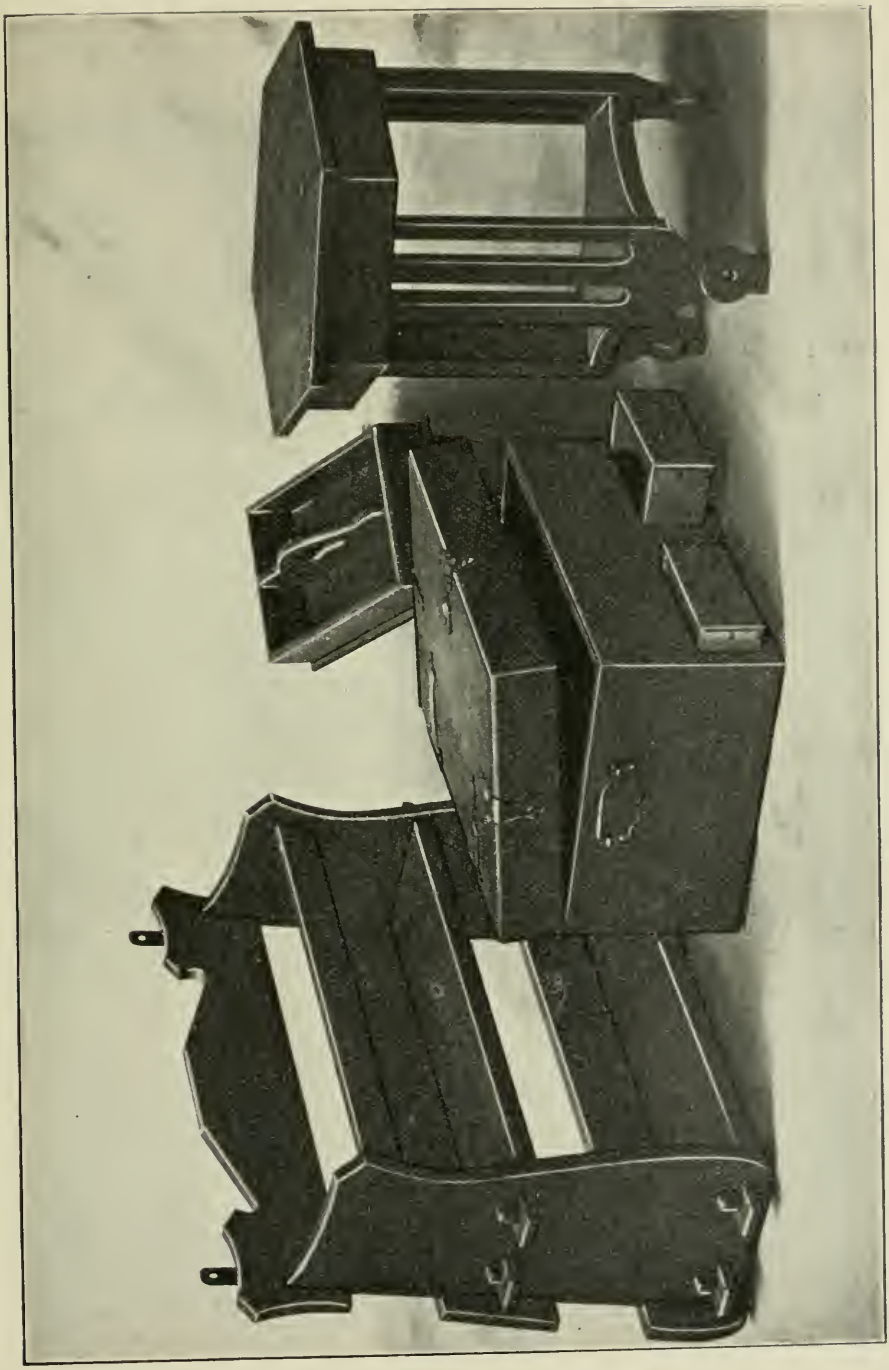
CLASSES, AT THE OPENING OF A NEW PUBLIC SCHOOL AT BRANTFORD.

been made for holding sewing materials, bulletin boards and various other small articles which can be used advantageously in this work.

Every Household Science centre should be in a building devoted entirely to educational work, preferably a school. Probably the only case where Household Science is struggling under adverse, petty and malicious criticism is due very largely to the fact that that particular centre is far removed from a school, and separated from other educational influences and discipline.

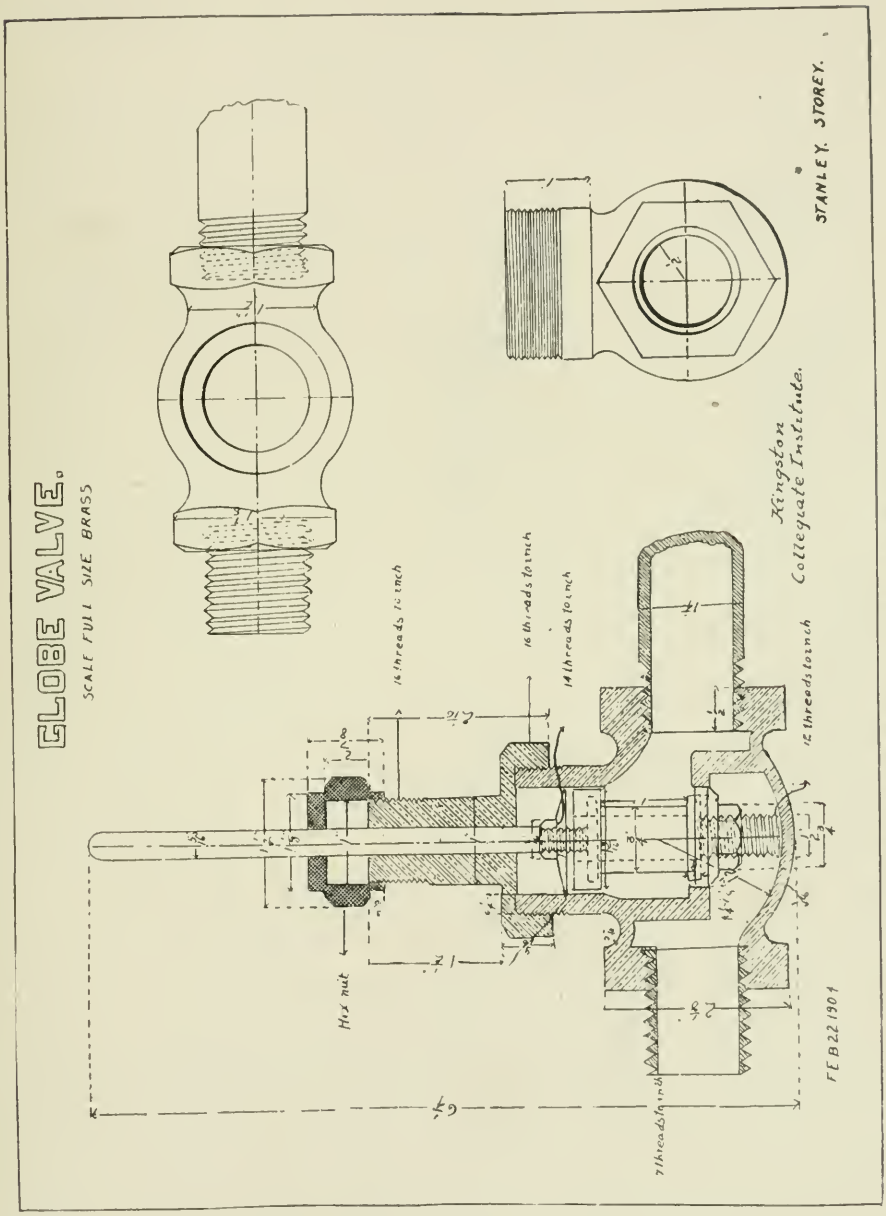
It still remains for some progressive Board of Education to show what can be done in the teaching of girls, by making provision for the larger subject of "Housewifery," as it is called in the English schools, by furnishing a model house or flat in which every department of Household work can be demonstrated and taught. The plan of teaching Housewifery is as follows: To take a typical case. The Manchester (England) Education Committee owned two cottages near one of the schools. These houses have been simply furnished and equipped and furnished suitably for a working man's house. The teacher lives in one of the houses and classes of twelve girls at a time are taught. All the practical details of household management are dealt with, including the buying and cooking of food, bread making, washing and mangling and ironing, cleaning, dusting, etc. By means of this provision about 120 girls will have the benefit of practical training and in time there is to be given simple lessons in hygiene and the tending and feeding of young children. To meet the requirements of the English Education Department it is necessary that each girl should have previously gone through a course of lessons in cookery and laundry work. If the last six months of a girl's life at school could be spent at such a centre in training for the duties of keeping the home, there can be no question but that a vast improvement would be effected in the comfort and economy of home life and such provision would have a decided tendency to prolong the school life of the girls. The need of training for home life is evident. It has been talked about until we are in danger of being drowned by the flood. If men started out with as little knowledge of their business affairs as does the average girl of housekeeping, business failures would be chronicled every day by the score, instead of the occasional few as now.

The equipment provided in most cases for simple cookery is admirable and great attention is paid to its careful use and preservation. One great defect in the majority of schools is the absence of a coal stove. I should like to see the Department establish a regulation, refusing to recognize any school not so equipped. Most of these schools are of course, in towns where gas can be had and for this reason only a gas range is provided, but from questions asked during my inspection I find that even in those towns, the majority of the girls use coal stoves in their home kitchens. In not a single case have I found a majority of the girls saying they use gas stoves. As a recent writer has said "half the success in cooking by coal or wood lies in knowing how to make a fire and keep it right. And yet I have seen scores of teachers of cooking, who could not make a coal or wood fire and keep it right to save their blessed souls." One teacher of household science, in a room fitted with a coal stove, told me that she did not consider it her business, or that of the girls under her care to keep it clean and in good working order, but that of the caretaker, and the result was that the stove was in an abominably dirty condition. A coal stove requires entirely different treatment in its cleaning and management from a gas range, and for this and other reasons a coal stove should be placed in a household science centre before it can be considered as properly equipped.

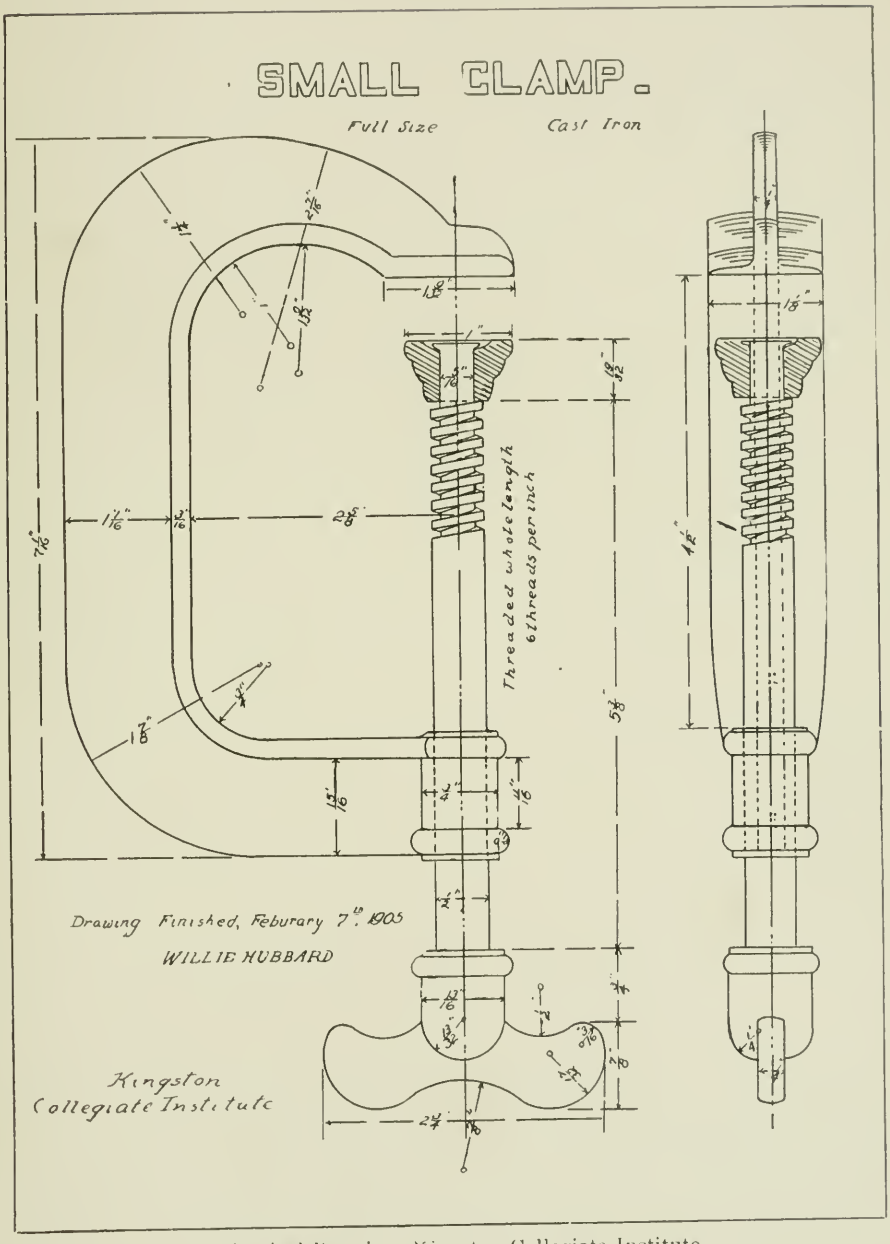


Woodwork, Macdonald Institute, Guelph.

Woodwork, Ottawa Public Schools.



Mechanical Drawing, Kingston Collegiate Institute.



Mechanical Drawing, Kingston Collegiate Institute.

In every school that gives instruction to older girls some information should be given on the care of young children. There is no subject of greater importance to a growing country, from whatever aspect it is viewed. In two or three Collegiate Institutes this has already been done and the results cannot fail to be other than beneficial. Dr. Hodgetts, the Chairman of the Provincial Board of Health, speaks plainly on this subject and I cannot do better than quote his words:

"Before leaving this subject I would point out the necessity for greater attention being given by this Board to drawing public notice to the growing need which exists for a better and more general education of the public in the nursing and in the care of infants. Too often is it found that the life of the first-born is sacrificed during the early months of its life by reason of the lack of knowledge on the part of the parents in the care necessary in the feeding of this valuable portion of our population, and a lack of knowledge as to the care in toilet and personal hygiene of these dear little infants. The same attention given by the parents as to how to bring up the baby as is given by them to the rearing of the young chickens or the thoroughbred calf or other divisions of the barn yard particularly as regards feeding, would be followed by equally good results if the child life were made a portion of the study of young women and men of our Province.

"The people of this Province have yet to realize the importance of this branch of education and that no false modesty must be permitted to exist in regard to it. The study of the infant life is of more importance than animal or vegetable life, or the making of butter, the baking of bread and the all-devoured American pie. The young women of our cities must be taught how to feed, nurse and clothe 'the baby,' and be shown how much more important to the state in this 'delicate?' subject than the feeding, fondling and toilet of the pet dog or cat, or the fascination of the gambling associated with bridge whist and other like social fads.

"This Board should impress upon the Legislature, upon the educationists, upon the clergy and the thousands of our church going population, yes, even upon the medical profession, the growing need of this neglected, nay, almost, I was going to say, forgotten subject being taken up and given a more prominent place in our nation's life. The care of the life of each baby born in our beautiful Province carries with it a responsibility shared in by each and all—legislator, clergyman, college professor, teacher—and each death due to lack of knowledge on the part of the parents in the proper rearing of the babe is due more or less in part to failure on their part to see that the youth of Ontario have received that information, for it cannot come by instinct; this is an abstract thing, an attribute of the brute—it may come by experience, but it can and should be obtained by compulsory education."

Some attention has been paid to this matter in the United States. At Buffalo, the use of tube bottles has been forbidden by law and the result was the reduction of infant mortality by one-half within a comparatively short time. In the New York cooking centres, the girls are taught how to sterilize and pasteurize milk, how to modify cows' milk to meet the needs of infants at different ages, how much food to give, how often to feed, what are and what are not the right shapes for feeding bottles. They also learn how to make barley water and foods suitable for the time when the child begins to require other than milk diet. Instruction is also given in "what the child must not have." Regular instruction is not given in Washington, but the girls are occasionally taken alone in one or other of the schools for personal instruction in nursery hygiene, as well as in the care of their own health.

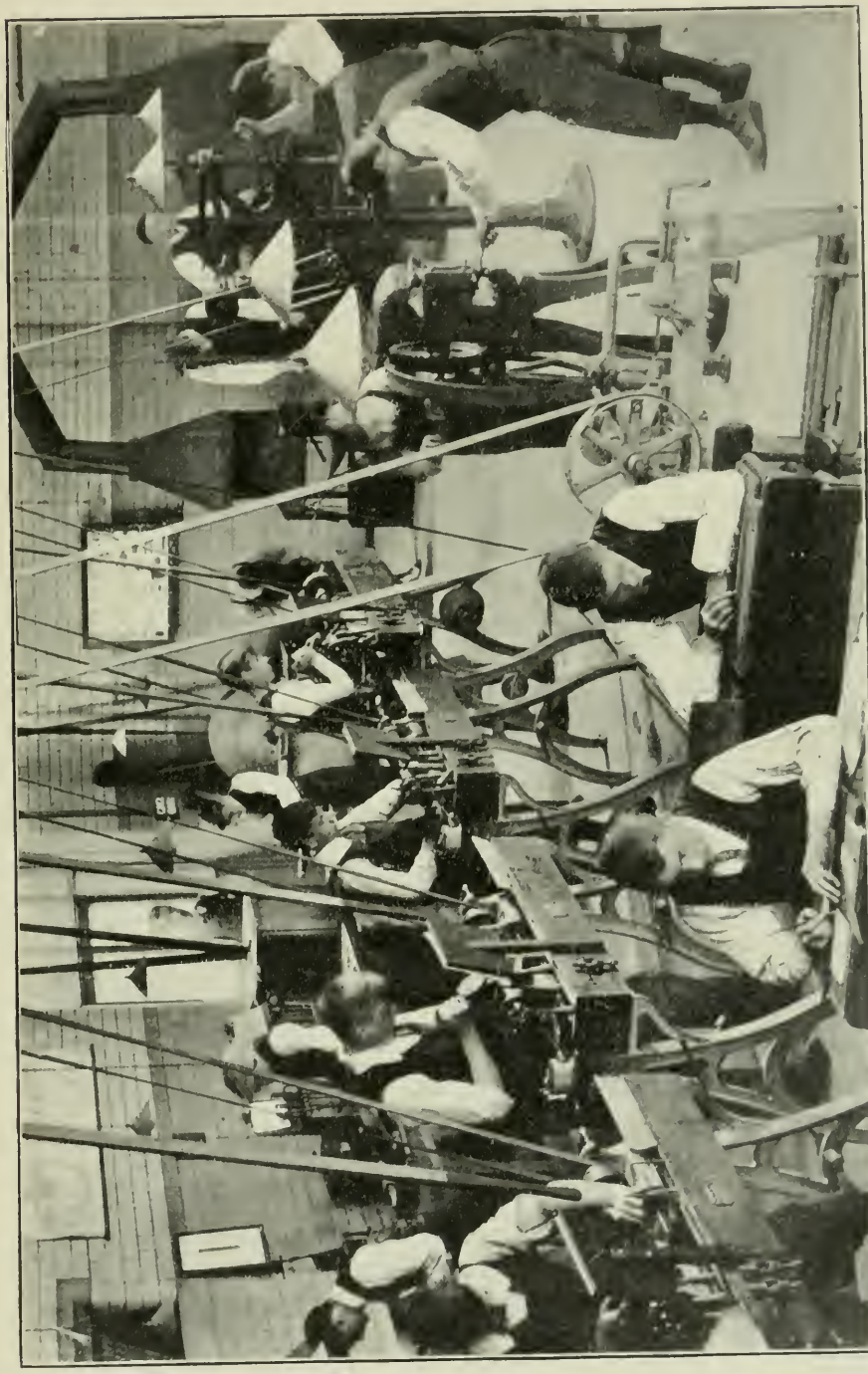
About six years ago the Manchester (England) Education Committee, appointed a lady to lecture to the girls of the Public Elementary schools on the nursing, feeding and tending of infants. Lectures are given to the girls in standard five (age twelve and upwards). The girls thus instructed come from seventy-seven schools and number nearly 6,000. The course includes six lectures and at the conclusion the girls write an account of the lessons given.

Altogether we have reason to be satisfied with the progress this work has made. There is seen now much less that formerly the making of expensive cakes and dishes as the work, except on special occasions, is being wisely restricted to the preparation of simple wholesome foods. The enthusiasm and ingenuity of the girls taking this work is remarkable and their bright attractive appearance as they go about it is an inspiring sight. Any person who has seen a properly conducted household science class at work and the results achieved, will have a broader view of the dignity of the subject, and its function in the training of the future housewives of this Province. Probably the weakest part of both household science and manual training instruction is its isolated character. By this I mean that it has not that living connection with other school subjects that it should have. It can and should be closely related to art, chemistry, physics, mathematics, English, geography, etc., and every subject touched upon benefits by its relation to others. Regarding this feature of the work, a United States teacher writes: "One of the most perfect examples of correlation the writer has ever seen is attracting considerable attention in a well known school. The mathematics teacher is the impulse of the related work, the plan being to direct a review in arithmetic, that it may have significance and application in a vigorous and vital way. The problem which was given to a class, was the building of a house. The land was purchased at a stated price, frontage foot of a definite depth. Walks and sidewalks were planned and drawn to scale. These were paved, concreted or made in any way the individual child preferred, she being responsible for proper and reasonable notions of cost of construction. The house plans in turn were elaborated and drawn correctly to scale and the various elevations carefully shown. The floors—hardwood or carpeted—the stairs, the walls,— tinted or papered, the bathroom with its tiling, the kitchen with its equipment, all came in for an exercise of judgment, selective taste and computation of values which should keep the expenditure within the estimate.

"A careful colour scheme of the whole house was made, and serious attention was paid to established principles of beauty of effects. Coal and wood bins were constructed in the cellar through computation of the needed fuel and the space necessary for that amount. Water tanks were necessary (the houses being country homes) and the methods of computing the dimensions of tanks capable of holding a definite number of gallons became clear and thinkable with the actual necessity before them. Interest on the investment compared with probable rent of such a house, tax, insurance, all came in as real problems entering into the accounts kept by the young householders. When the houses were finished the families moved in and lived. Menus for the week were prepared under the direction of the teacher of Household Science. The various members of the class were assigned as the various shopkeepers, butchers, bakers, and candlestick makers, and every child must do business with them and the bank, each keeping her money account with scrupulous care.

"No careful and serious-minded mother could have carried on this homemaking with more reality, interest or dignity. At the time of this writing

Manual Training Woodwork, Central Higher Grade School, Leeds, Eng.



Metal Work. Central Higher Grade School, Leeds, England.

Wood Turning, Central Higher Grade School, Leeds, England.

the library is going into the hands of the English teacher to be stocked with books selected and bought by the children under her guidance, and the next long vacation the families will travel in foreign lands (various) noting especially, exchange, longitude and time and industrial life. The plan is without end in its potentialities and every teacher in the school is engaged in it, the special teacher of Household Science most of all outside the inaugurator of the plan who is the Supervisor of Mathematics in the school. The harmony of thinking and the high type of consciousness aroused make the work of great value to the children and also to pedagogy."

Rural Schools.

I regret that I am not able to report any extension of Manual Training, even in its elementary forms among the rural schools of the Province. Beyond the Consolidated School at Guelph and the Rittenhouse school no rural school has felt able to do much and these two exceptions are special cases which owe the presence of these subjects to the generosity of private individuals.

Surely the country child has a right to as good educational opportunity as a child attending the best city school and in order that this result may be secured more money must be spent in the country school, and it must be spent in a better way. It is not necessary that the country school be of the same kind as the city school. A different environment renders necessary certain differences in organization and method, but equal opportunity should be provided. The opinion has been frequently expressed that the boy in the country, the boy on the farm, does not need manual training, that he gets enough of it in performing his daily tasks on the farm and round the house. This opinion is very largely based on the assumption that "manual training" and "manual labour" are terms of like meaning. Calvin Milton Woodward, probably one of the greatest authorities on all forms of manual training, says on this point "We are frequently told that the boy from the farm has had manual training; and it is true that he has had some manual training, but he has had a great deal of manual labour with it. I know, because I was a farm boy and learned everything that could be learned on a farm previous to my college course. I learned to use correctly the hoe, the shovel, the plough, the scythe, the cradle and the axe, but I never learned the proper use of bench tools, nor had we a machine tool of any kind, till the mowing machine and the reaper came. I knew nothing of drawing, nothing of the mechanic arts, properly so called. Nineteen-twentieths of my time was spent simply in hard labour, which had no education beyond an incidental and imperfect knowledge of crops and soils and the market. Manual training would have been of great value and a few lessons would have saved me much time and money."

The idea expressed in the above quotation is one that has hindered the spread of manaul training in the rural schools and another is that, if taken, the methods adopted must conform to those of the towns and cities. Any rural community that attempts to inaugurate this subject on the city plan is making a grave mistake. The rural school has its own problems, and these problems are essentially different from those presented by a town or city school. The country school is fortunate in many respects, but in none more so than the fact that it is surrounded with materials and means for the best kind of manual training. In last year's report a drawing was given of a cheap, yet simple and efficient bench and others can be furnished on application to the Department. There is no possible reason why every

rural school should not have at least one bench and a set of common tools. Much and lasting good could be done by these simple means.

"Manual Training" is a term of which as yet no satisfactory definition has ever been given. To one teacher of the subject it means one thing and to another something entirely different. Where men who have studied the question for years and now make it their life business, differ, how can it be expected that the man in the street will have a clear conception of what the term connotes.

Neither is the term "Industrial Education" well defined. In 1903, a Committee of the National Educational Association was appointed to consider the question of "Industrial Education in Schools for Rural Communities" and in their report they define the term as follows: "Industrial Education has for its purpose the acquiring of a body of usable knowledge of greater or less extent relating to industrial conditions, processes and organization, and to the administration of affairs incident to the environment of the individual being educated, involving the gaining of some skill in the use of such knowledge, and the securing of mental, æsthestic and ethical training through the acquisition and use of the knowledge indicated."

In the manual training taken at the Consolidated School, Guelph, we have at present the best examples of the adaptation of the subject to rural conditions and requirements, while at the Rittenhouse School a very creditable attempt is being made in the same direction. The teacher at Guelph has utilized, in a very effective manner, material easily procured in every rural district, and has taught lessons that are far more beneficial than would have been the case had the material been procured from a wood yard, as it had to be industriously searched for and considerable ingenuity used in its application for the purpose intended. Our rural schools train more than one-half the population, and they should boldly grapple with the fact that the majority of those educated in them will continue to live in the country, either from choice or necessity and it will be from choice if the right methods be adopted in their education. With reference to industrial work in these schools the report of the Committee above referred to says "For the beginnings of the work in carpentry, a five dollar outfit containing fourteen standard tools may be had, and the small amount of lumber required may be obtained easily.

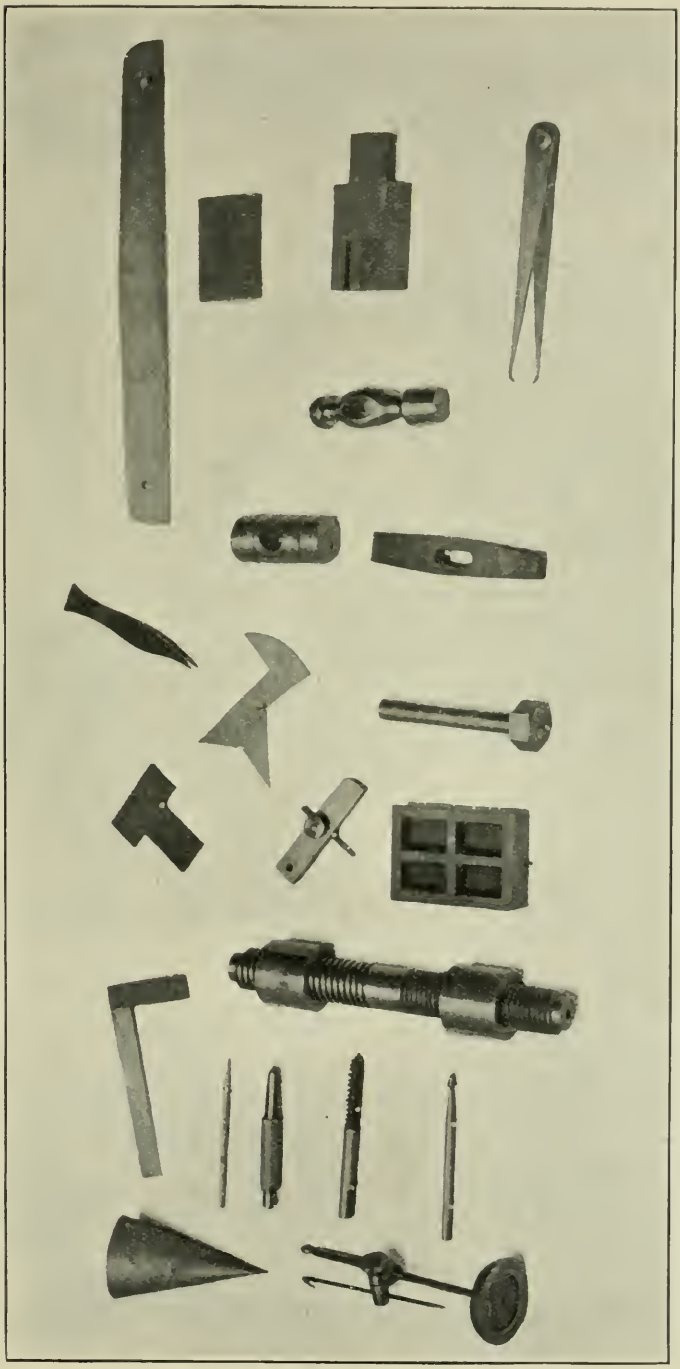
The school carpentry should keep in view the tools the boy will most probably have at home, and may well be directed to the making of articles which can be put to some immediate use at home or in the school.

If, in the school there are a number of large boys, the carpentry may well expand within a year or two, so as to take the enterprise of building a small shop on the school grounds and fitting it up for working purposes. Under specially favourable circumstances, it will not be difficult to extend it to the making of plans for the construction of farm buildings of the simpler sort.

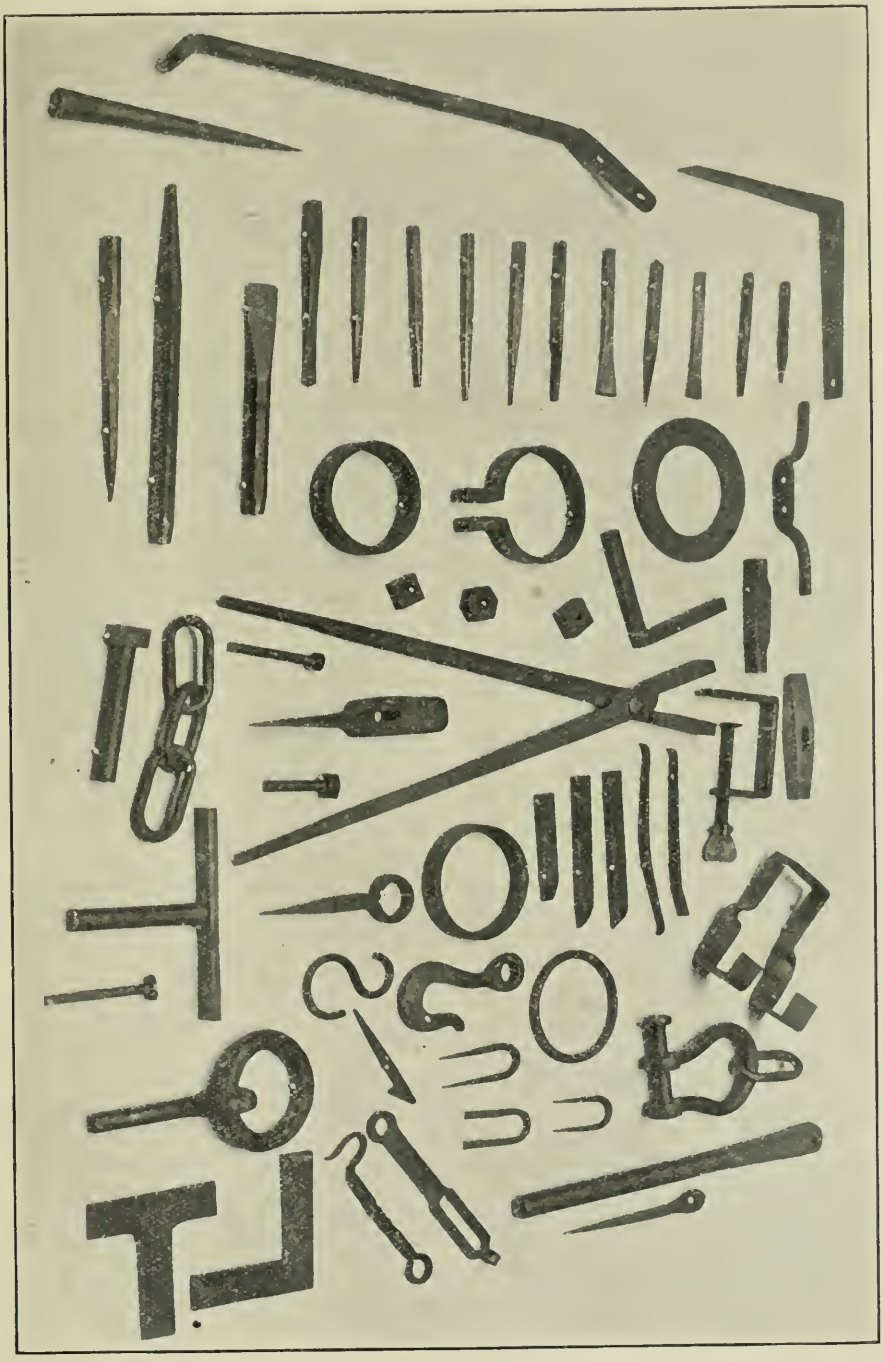
With the right kind of a teacher, exercises may be given in the sewing of leather and in the splicing of ropes, finding practical application in the mending of harness, making of halters, etc., as the necessities of the farm may require.

Some practical lessons in painting and glazing may be given, and the opportunities are not lacking for applying the knowledge thus gained on the school or farm buildings.

In domestic art, with teachers properly trained (and they may perhaps secure training in some lines of this work more readily than in the other fields of industrial education, especially in sewing) something might be



Machine Shop Practice, Macdonald Institute, Guelph.



Forging, Macdonald Institute, Guelph.

done in almost every country school with the girls, provided wisdom is used in the way the work is organized and carried on."

I have seen in a small country school in Sweden a group of boys from ten to thirteen years of age, working enthusiastically in an ill lighted and badly ventilated room and using such tools as our Canadian boys have never seen. Such schools are dotted all over Sweden and are producing characters so true and strong as to cause the nation to bless the public schools whose chief business is as President Roosevelt says "the making of Citizens."

A book that can be recommended to every teacher in the Province, but particularly to rural school teachers, is "Amongst Country Schools" by O. J. Kern. This is full of the most helpful hints and suggestions and should be read and studied by every one who wishes to understand the rural school problem.

Evening Schools or Classes.

If technical education is ever to be established on a sound and useful basis in this country, it will have to begin, as in every other, with a system of evening or Sunday classes, for not only is it necessary to train those who will in future occupy our factories and work shops, but it is equally and perhaps more important that those who are at present engaged therein should receive that technical training which they cannot get while tied to one machine or confined to one process during their daily employment.

At present we have evening classes established in Toronto, Hamilton, Brantford, Brockville (Household Science), Owen Sound (Household Science). Beyond this little has been done except some private effort such as the classes attached to the various Young Men's Christian Associations and so-called Business Colleges.

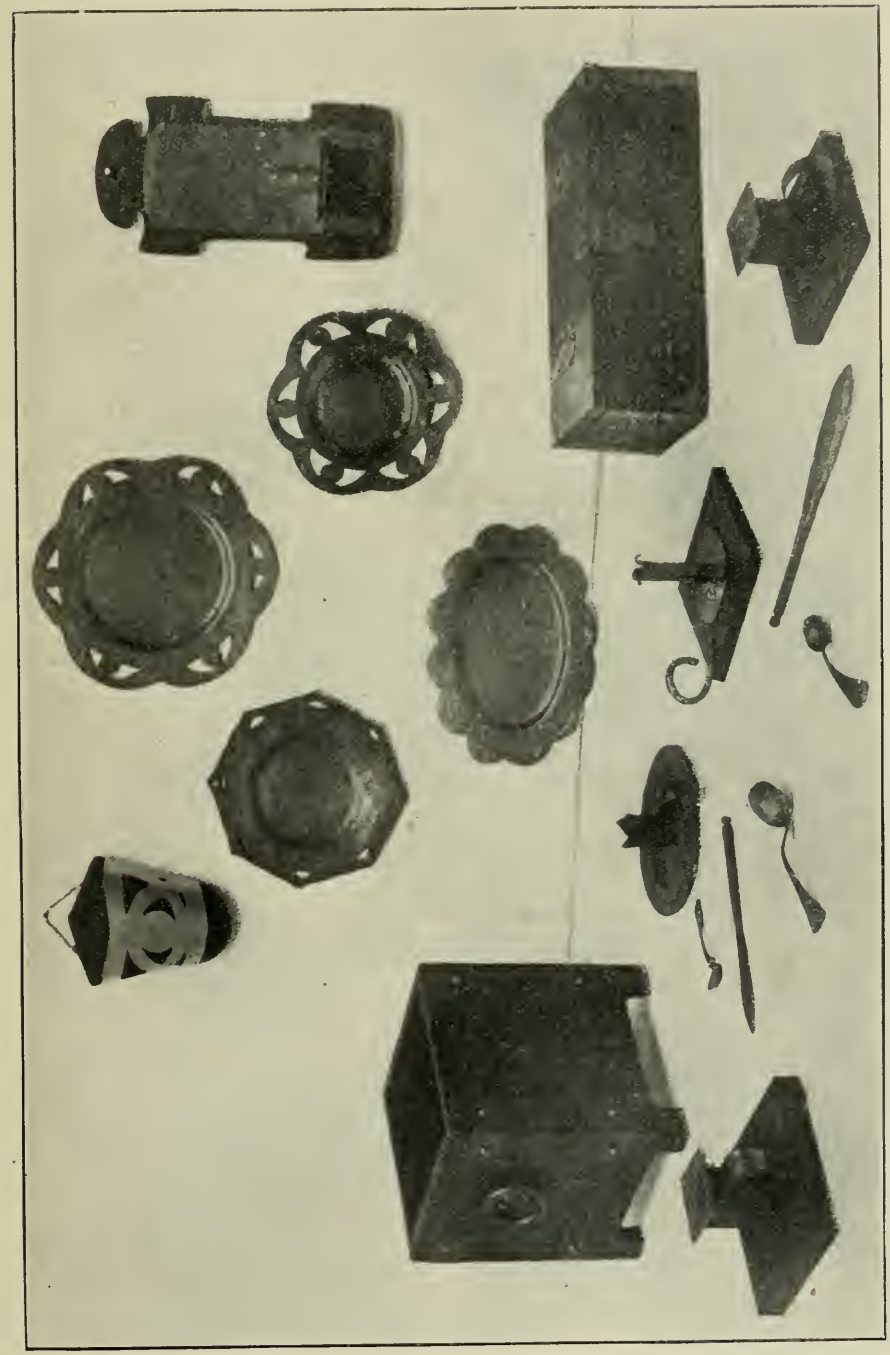
The citizens of the Province are not reaping the benefits that should acrue to them from their school buildings. A number of these cost large sums and are built on land costing much and yet the vast majority of them are closed nineteen hours out of the twenty-four, while for at least three months every year they are entirely closed. In a report on "The Extended Use of School Buildings" occurs the following: "It is an inspiring sight on any evening during the term to approach the school building and to see the light streaming from every window, and to realize that if the visitor had come upon it but a short time before he would have found it standing blank and dark, with doors locked and without even the fixtures in the building to render lights possible. In order to see all the work carried on at the school it is necessary, first to enter the basement, where one's ears are greeted with the busy sound of saw and plane and hammer, issuing from the elementary and advanced woodworking rooms. Then in going from one to another of the twenty-four rooms, each filled with its throng of busy and interested people, the visitor can pass an inspiring and enjoyable evening. Not the least agreeable moment is the sensation experienced when, after going into all these different rooms, the visitor enters the school hall at the top of the building and finds there a hundred and fifty or more young people singing with the greatest interest and evident delight the Soldier's Chorus or the Village Blacksmith." The evening drawing schools in the city of Boston offer a suggestive example of a well thought out and organized scheme. As has been previously pointed out, drawing is at the basis of every trade and industry and in all schools dealing with technical or industrial subjects, occupies the foremost place. These schools were first organized in 1870 with over 1,000 registered students. In the 1872-73 report of the Committee on

Drawing special attention was called to the good work already accomplished, "as it warrants the reasonable hope that Massachusetts will eventually take a high stand among her sister States through the application of Art to Industry. Those who believe that it is only through such means that she can in the future retain her hitherto undisputed position as a leading manufacturing State, will rejoice at these proofs of native aptitude for original design." In 1902, an entire re-organization was undertaken as well as a second review of the course of study. There are now six of these evening drawing schools maintained by the city of Boston. The schools are free, all materials are furnished and the instruction is planned to fit the needs of those who desire to study drawing and design as an aid in their daily occupation. The subjects taken are divided into six branches, freehand is separated from design, and the costume model is introduced into four schools. The work in clay modelling includes modelling from the costume model and studies in metal and design applicable to the various handicrafts. Mechanical, architectural and ship draughting are among the subjects taken and the extended use of steel in all constructed projects is thought to have demanded a new course in structural drawing, particularly applicable to that material.

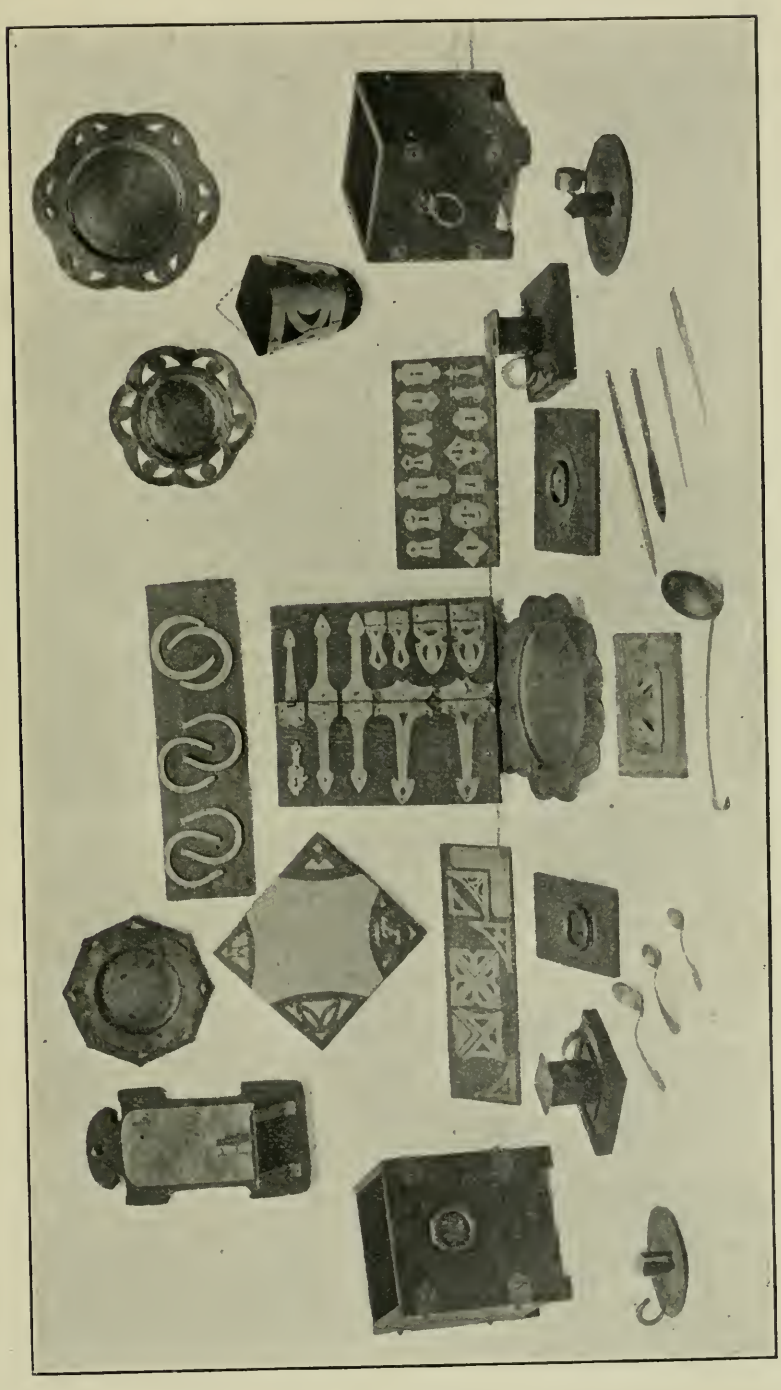
The term of these schools continues for sixty-six working nights. No person is admitted under the age of fifteen or at any other time than at the beginning of the term except by express permission of the Principal of the school. Students are admitted to the first year class without examination. Those who can give evidence of their ability to undertake advanced work are admitted to the second or third year classes. The School Committee reserves the right to retain as City property certain drawings from each student's work during each of the three years' course of instruction. These drawings are used for purposes of record and exhibition, and to display from time to time in the different class rooms as incentives to students.

Examinations are held each year and certificates granted while a student who completes the full three years' work in any subject is granted the diploma of the evening drawing school. It will be seen that this means 198 hours of definite instruction. The course in each subject is most carefully planned and can be studied in the various reports issued by the Committee on Drawing. In the reports referred to many instances are given of great success in industrial pursuits made by the students of these schools. So successful have these schools been that there is now being planned a great extension of the work in the form of a day school which will be entirely devoted to instruction in industrial art.

Evening school instruction is at best a poor substitute for adequate instruction in the day time but owing to social conditions cannot be dispensed with. This view is well expressed in "Industrial Education and Industrial Conditions in Germany": 'The evening school problem is a real bane to industrial education, and is not confined to any one country or people, but is common to the world. It is inherent in no particular system but finds its origin in an unavoidable condition of life. It is unfortunate but apparently irremediable. It has received the close attention and earnest thought of the most enthusiastic and conscientious promoters of the new education. It has very likely come to stay. Not until we enjoy a universal prosperity can opportunities of education be open equally to all. The disadvantages of evening schools are numerous and are easily patent to any interested observer. Intellectual application on Sundays or in the evening when the body is exhausted with a day or week of physical employment, leads to overexertion, and is apt to arouse a feeling of repulsion in the learner toward



Work of Pupils at Guelph Consolidated School.



Work in Copper and Wood, Consolidated School, Guelph.

the study which robs him of well earned repose. It has also been suggested that Sunday study of industrial subjects interferes with church work, and leads to a neglect of religion and higher moral thinking. Furthermore, evening and Sundays together offer too few hours for proper systematic instruction."

Notwithstanding the great and admitted defects of evening class instruction, the fact remains that for a large majority of our population it is the only form that can be made available. It is either that or none. Those countries—particularly England, France, Germany, Switzerland, Belgium and the United States—that have well organized systems of evening classes do not of course restrict their work to drawing, though that is made the basis of all. Particularly on the continent of Europe every trade and industry has classes for its own special work. For instance in one of the wine growing districts a course of lessons is given on wine, beginning with the growth of the grape, treating of the diseases to which it is subject, the modes of combatting the spread of phylloxera, the methods of wine making, the chemistry of fermentation, the processes involved in making the various kinds of wines, the modes of testing and in short the whole of its chemical history.

Of all continental towns Munich has probably made the greatest advance within the past few years. Since 1900 she has been transforming her continuation (evening) schools into elementary technical schools for those engaged in trade and business. There are now thirty-eight schools of this kind maintained by the city. In 1900 schools were opened for butchers, shoemakers, chimney sweeps and barbers; in 1901 for wood turners, glaziers, gardeners, confectioners, waggon makers, blacksmiths, tailors, photographers, interior decorators, painters' materials; in 1902 for hotel waiters, coachmen, painters, paperhangers, bookbinders, potters and stone setters, watchmakers, clockmakers, jewellers, goldsmiths and silversmiths; in 1903 for foundrymen, pewterers, coppersmiths, tinsmiths and plumbers, stucco workers and marble cutters, woodcarvers, saddlers and leather workers, and in 1905 for business apprentices, print and type setters, lithographers and engravers, ornamental iron workers, mechanics, cabinet making and carpenters. These schools are but another evidence of the German belief that efficiency in any calling, from chimney sweeping to banking, is only to be gained by special training. These schools are not in every case evening schools. Continuation school education is compulsory for at least three years for all elementary school graduates. The law stipulates that employees shall be given the necessary time—six to ten hours per week—to attend these schools. The technical instruction is given in these schools at present by a member of the trade or business concerned but it often happens that many good workers are not good teachers, and for this reason the city is encouraging trained teachers to learn the several trades, leave of absence being granted for this purpose. Even a cursory view of the continuation schools for artisans almost staggers one by the great variety of instruction they impart.

The evening schools of England and continental Europe have reached their present state of efficiency through much struggle and tribulation. In every country where an attempt has been made to establish them on the basis of the ordinary day school, that attempt has miserably failed. Several considerations should be carefully noted before any attempt can be made to establish these schools with a reasonable hope of lasting success. The two schools—day and evening—differ very largely, both in their aim and purpose. While the day school should be practical and certainly not ignore the demands of industrial life, its chief aim is general rather than particular. Only a very small number of those attending are there for the purpose of

improving their general education. The large majority are there for purposes of direct utility and can only be interested and kept by such work as has a direct bearing on their daily labour or will fit them for different work—more remunerative than that in which they are at present engaged. Their main and sometimes their only object is dollars and cents. Day school attendance is, or should be, compulsory and the studies of each child shall take up are also prescribed by law. In the evening school, at present at any rate, the attendance is voluntary and the student himself must be allowed to say what branches he shall study. The method of treatment of each subject is also different. In the day school the subject is treated methodically, and logically developed—so much so sometimes that one loses sight of the subject in rapt admiration of the method—but in the evening school no such necessity exists, only so much of the subject need be taken as will elucidate the special point on which the student desires information. Both the wants and necessities of the students must be considered. Any one who has had experience of evening school work knows that these two terms are not synonomous and it is one of the functions of the evening school teacher to so form and shape his instruction that the student will soon come to want what he needs. In the evening school the method of classification should also be different, the student should not be classified by ability alone. If this is done men will object to sit with boys who have recently come from the day schools and whose elementary knowledge is fresher and more readily drawn upon. Age and occupation should be the basis upon which the classification should be made.

Evening classes should be encouraged in almost every High School in the Province and a Departmental grant given, on the carrying out of certain conditions based on attendance, subjects taken, and efficiency of the instruction given.

Technical Education.

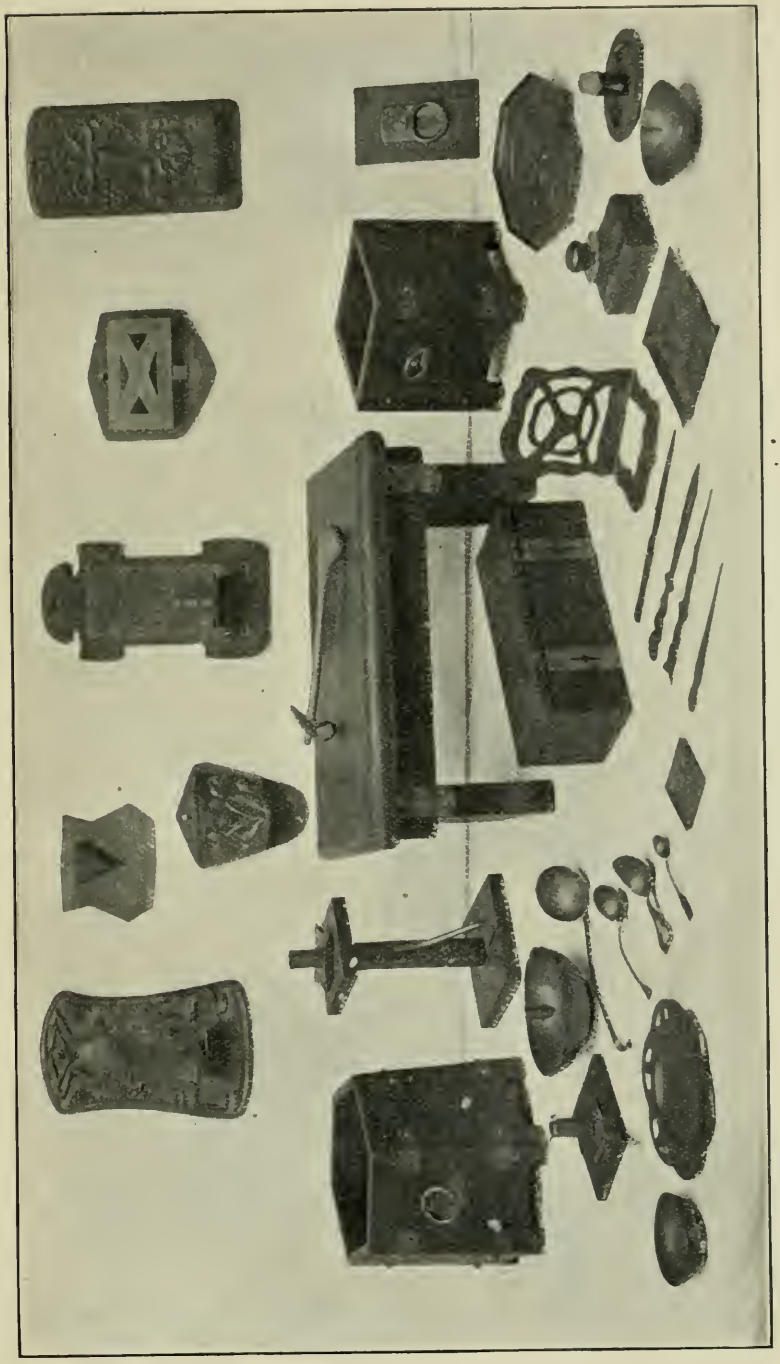
During the year I have made an attempt to obtain from prominent labour organizations and manufacturers their opinions on technical education—the scope it should have and the form it should take. I quote from the letters of the manufacturers but am not able to give the replies of the trade unions as these have either not replied or have answered to the effect that the subject is under consideration.

The "National Society for the Promotion of Industrial Education" was formed in the United States in November, 1906. Its purpose is expressed by its title. One of the methods adopted is the issue of bulletins on various phases of the subject. Four of these have been published as follows:—

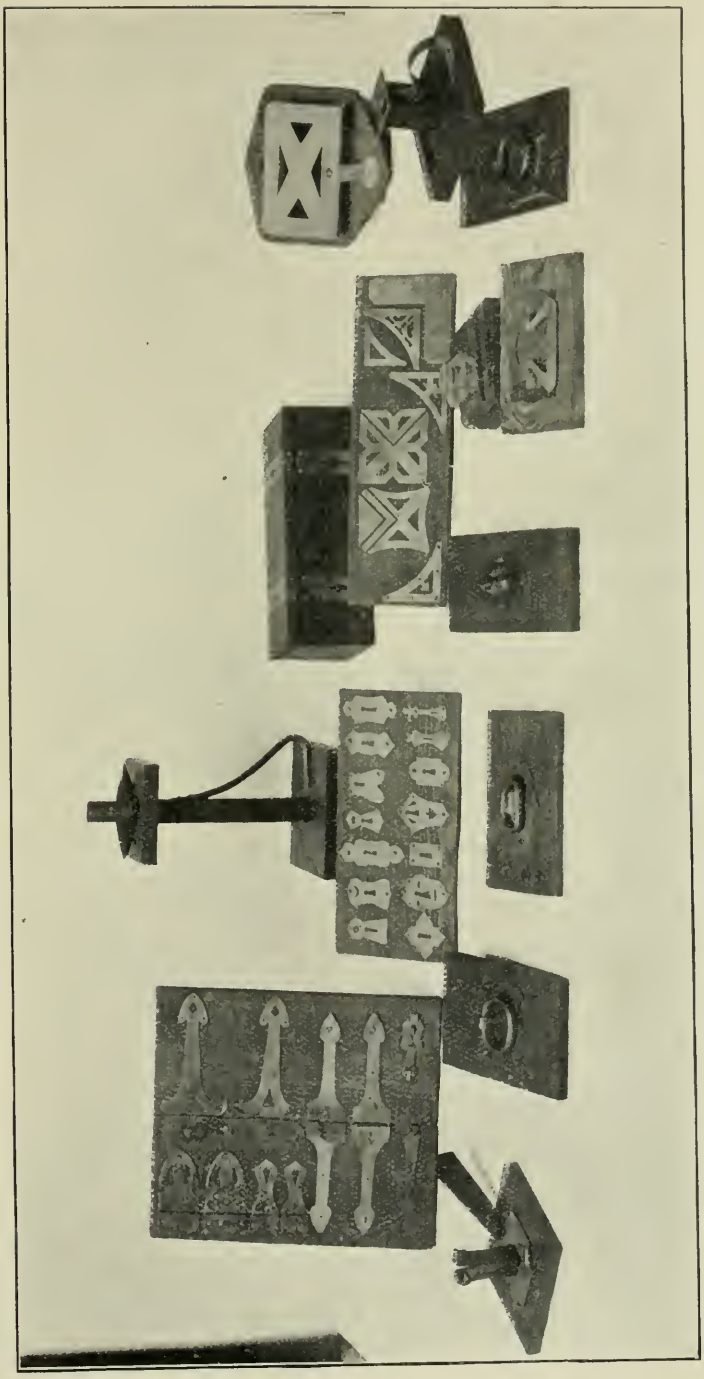
1. Proceedings of the Organization Meeting.
2. A Select Bibliography of Industrial Education.
3. A Symposium on Industrial Education.
4. Industrial Training for Women.

Bulletin No. 3 gives the result of a circular sent to three hundred manufacturers and representatives of organized labour. The questions asked (as suggestions) in this circular were as follows:—

1. Are you in favour generally of Industrial Education?
2. What particular form of Industrial Education do you favour?
3. Do you believe that all trades may be taught; if not, what trades may properly be taught in trade schools?
4. What should the trade school aim to do for its students?
5. How far can the trade schools give preparation for the trade?



Work at Consolidated School, Guelph.



Woodwork and Copper Work, Consolidated School, Guelph.

6. Are public trade schools a just charge on the public treasury, or would you have trade schools under private auspices?

7. Do you favour public evening trade schools?

8. Would you have the schools open to all applicants; if not, to what class of students would you restrict the instruction?

9. Do you favour trade school preparatory work under public school auspices?

10. Do you favour trade schools conducted by, or under the auspices of manufacturing concerns?

11. Do you deprecate any schools now organized? If so, please give your reasons for disapproving of them.

12. Will you state, in addition to the above, any other ideas you have respecting trade teaching, and the proper function of the trade school.

In the absence of letters from our own labour organizations I give quotations from some of the replies in answer to the above circular and as there is a surprising unanimity, on all questions affecting labour, among its representatives, they will probably very largely agree with the opinions of our own representatives of labour. The whole bulletin opens with a letter from the President of the United States in which he quotes from an address that he was shortly to deliver. That address is entitled "The man who works with his hands" and will well repay perusal. It has been issued as a circular by the United States Department of Agriculture and can be obtained on application.

Mr. Henry Adams, Secretary of the Central Labour Union of Boston says: "We Trade Unionists oppose trade schools because as a rule, the advocates are men who employ cheap or non-union labour, and whose only object is to prevent the worker from obtaining a fair wage, or a shorter work day, and who are opposed to the associated effort of the wage earner.

"Personally I am of opinion that the trade school is coming, hence we must recognize the inevitable. The public school curriculum is based, in the case of the grammar school on that of the high school; that again on that of the college or university. This I believe is a mistake. If one were to take the children of twelve and for two years to teach them the use of tools, they would find themselves better equipped for the battle of life. This should be the aim of the teacher.

"After the child has arrived at fourteen years of age there should be a Public Institute of Technology, where every pupil could enter free with no charge for tuition or books or laboratory work; also arrangements where boys who desire could enter some manufacturing concern and be taught a trade, not part of a trade. The trade school is only a legitimate out-growth of the present public school system and is a just charge upon the public. There should be evening schools for men in engineering, electricity, plumbing. I am opposed to trade schools run by private corporations as they are run for profit to stockholders, not for public good. What is needed is to secure the confidence of the worker. This can be done if the trade schools are in the hands of the proper men and kept out of politics.

"Under the above conditions, I favour the trade school believing that the children of mechanics rarely go to school after fourteen years of age, and with our present system are not fitted to do anything for a livelihood. Anything for the uplifting of the race will secure the support of all trade unionists."

Mr. John Fitzpatrick, President of Chicago Federation of Labour, says: "I am in favour generally of Industrial Education. The form I favour is that of the preparatory and practical. I believe that all trades can be

taught and consider that the aim of the trade school should be to give the best preparatory and practical education possible.

"The question of how far the trade school can give preparation for the trade can only be determined by experience. I believe assuredly that public trade schools are a just charge on the public treasury, and I favour public evening trade schools.

"I would have all trade schools open to all; sex, creed, colour or nationality should not debar anyone. I favour preparatory trade school work under public auspices, but do not favour trade schools conducted by manufacturing concerns. I deprecate certain schools now organized; referring in this to correspondence and other trade schools which cannot give practical education, and because of this deceive both the student and employer."

Mr. John Golden, President, United Textile Workers of America, says amongst other things in a long and comprehensive letter: "I can safely say that organized labour is not, and never will be opposed to Industrial Education properly controlled and scientifically administered. There are very few working men who have not got an ambition to give their children the best possible education, and my experience in the labour movement convinces me that this desire on the part of parents, (particularly those who have been somewhat handicapped themselves along this line) becomes keener every year."

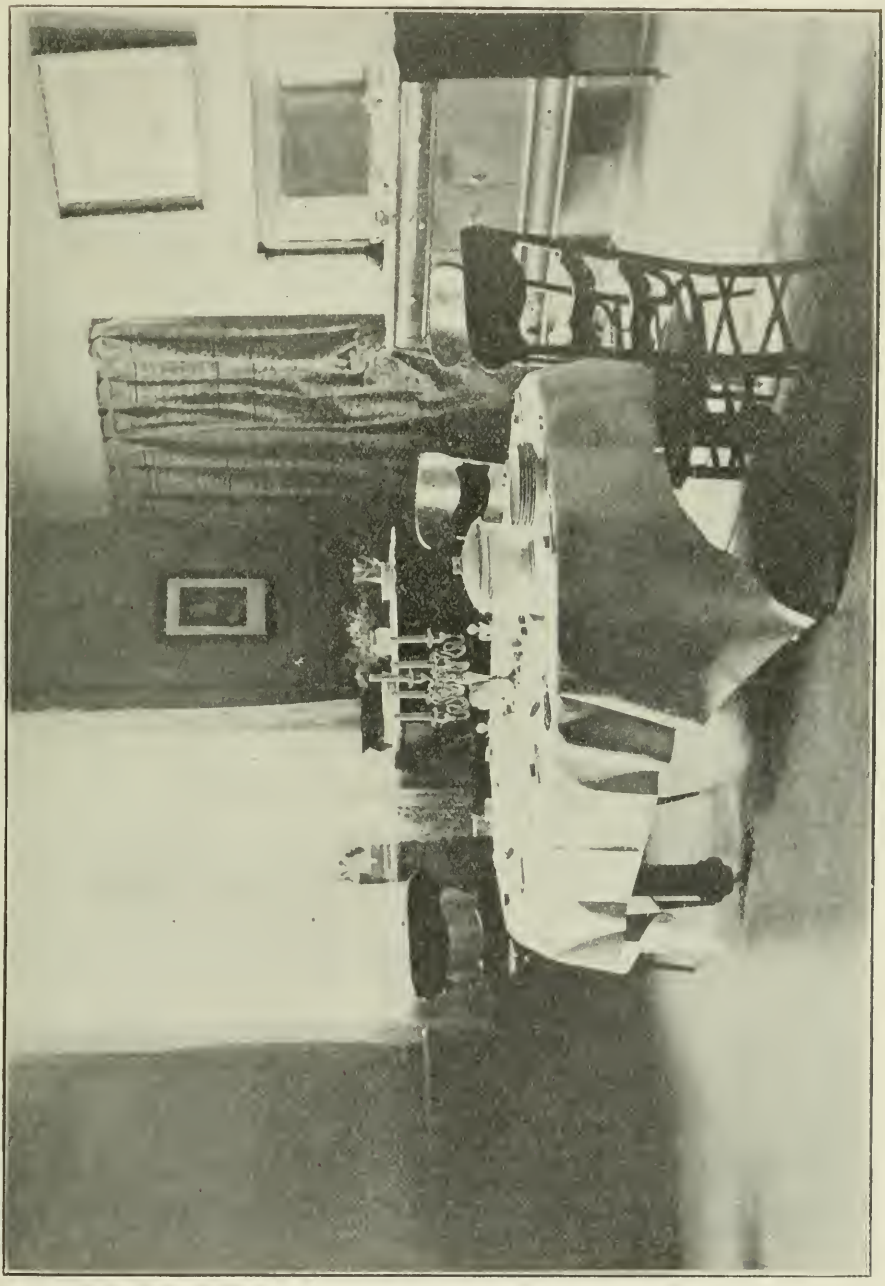
Mr. William D. Huber, General President, United Brotherhood of Carpenters and Joiners, writes: "In regard to Industrial Education I wish to say frankly that I do not think much of it. In the first place, that there is nothing like 'rubbing up against the real thing' to educate a young man for any trade. How can this be brought about, may I ask, when everything which a student at one of these 'industrial colleges' needs is right at his finger tips? I speak frankly when I say that a young man cannot learn the 'carpenter trade' at any school; at least not in a practical manner, and we know that theory does not always work out in practice.

"Take for instance the framing of a roof. Give the ordinary carpenter a steel square, a pencil, and the necessary two by fours or sixes or whatever is used, and he will frame up your roof for you right on the ground, and when it is put up it will fit. Now then, take the young man who is trying to master this detail,—and it is only one of a thousand in a trade school He hears a long lecture about it. He is given the blue prints and plans, but do you think he would go out and even attempt to do such work as this without some practical knowledge?

"I say to you sincerely and truthfully, as I see it, that the young man cannot learn our trade in any school, and this would hold good I should assume in all other practical mechanical trades."

Mr. Richard Moldenke, Secretary, American Foundrymen's Association, says: "I believe that the only hope we have to keep this nation in the front industrially, is to push industrial education with might and main, and not wait very long before beginning. I prefer a graded method for imparting the desired information. Thus, begin with the Kindergarten to teach children to use their hands and eyes. Next manual training in the public schools. Next trade schools for those who do not aspire to reach the technical school. Finally while the young men earn money, the night school for general education and specific industrial training.

"All trades should be taught. No boy or girl should be denied the opportunity to learn what he or she is best fitted for. This may have to come gradually as the most important trades naturally come first. The trade school should teach its students the principles of the respective trades in question, together with enough practical manipulation, to make the student



Dining Room, Toronto Normal School.

A Group of Home Makers, Wellesley Public School, Toronto.

self-supporting from the start after leaving the school. It should also give him a general education, so as not to get the student into grooves.

"The trade school can give preparation to the student far enough to make him understand everything he is told to do in an actual shop, without, however, giving the time to make him expert in his work. This must come to him in later life in the succession of shops he will go to from time to time. He should as a matter of fact come out of the school somewhere between the apprenticeship and the journeyman, preferably nearer the journeyman. Trade schools should be established by the public. The training of men who are to earn money enough to pay higher wages is a direct benefit to the community, and hence a good public investment.

"I favour public evening trade schools, especially for those who are too poor to give several years of their early life to the day trade schools. In whatever situation a young man or boy is, he should have the opportunity to learn a trade whether he will eventually use it or not. This forms a ready means of livelihood, under any succession of adverse circumstances. I would have the simpler forms of manual training compulsory, and the trade instruction optional, but open to all applicants with a sort of probationary arrangement so that the person unfit for what he has chosen, may be relegated to to what he is fit for or else be dropped. There is nothing to be gained in turning out wood butchers.

"I favour public trade schools conducted by public teachers, the course of instruction to be fixed by the proper Board, by and with the advice of several National or Local associations of the particular trades (the producing and the manufacturing end) so that counsel may be had from those most in touch with the needs of the industries. I do not deprecate any school, no matter what its limitations may be. Let us have more of them and still more."

Mr. W. E. Hall, Secretary Treasurer, International Association of Master House Painters and Decorators of the United States and Canada, writes: "Our International Association is very much interested in the question of industrial education. We have permanent committees on trade schools and apprenticeship. In answering the questions I do so from a personal standpoint, but I believe I can safely say that our Association as a whole holds views similar to my own. We are unequivocally in favour of industrial education, and we are particularly in favour of instruction in the building trades All trades may be taught, especially masonry, carpentry, plumbing, plastering and painting.

"The trade school should teach its students the underlying principles of the trade they select, and give them as much actual practice as can be afforded in so limited a situation. The trade school should carry its instruction to the limits of effective workmanship on the part of the student, or else discourage him from endeavouring to qualify himself for work that nature never intended him to do.

"Public trade schools should be established and charged to the localities where the schools are instituted. Evening public trade schools are advocated. We cannot have too many intelligent mechanics. Such schools should be open to all applicants. Give the young men a preference and keep them in separate classes. Men of twenty-one or over should be instructed in the evenings or in some way, so as not to prevent the younger men having the right of way in instruction.

"Preparatory trade school work should be begun in the grammar schools under public school auspices, one or two half days a week being given to this instruction to the exclusion of all other studies. Where public trade

schools cannot be established, I would welcome the establishment of any trade school."

I have received many letters from manufacturers regarding this subject and from some I quote. It has not been considered wise to include any remarks bearing on trade unions and for the same reason there has not been included in the quoted opinions of labour leaders any corresponding reference to the other side.

Mr. John Labatt writes: "I think the Department if Education is only doing its duty to the people by developing at the earliest possible moment trade, industrial and technical education in this Province. I think the independent Business Colleges could be affiliated with the Public Schools, and Commercial Courses in Collegiate Institutes could be extended and with such amendments and improvements as might be found necessary would give the facilities for trading section.

"Industrial Education is most important to this Province where manufacturing plants of all kinds are increasing and practical knowledge is needed. It is a matter for educationists to plan and devise schemes for primary industrial schools but some scheme should be arrived at whereby advancing students could enter factories and bring their studies to bear practically. It might be done by arrangement with proprietors of all large industries. I understand this is done in some parts of England.

"As to the third class. Chemical and Electrical knowledge enters now into so many lines that the Government should not fail to provide the means for acquiring such at a minimum cost. I think schools should be established in several districts in connection with the Universities and suitable professors and teachers found.

"In order that such education should be available to all, I think numerous scholarships should be founded throughout the country in all Collegiate Institutes and schools of similar standing, so that the 'brainy young student' can continue his education to its conclusion in spite of poverty and the necessity of earning a living in his early years. The Rhodes establishment of Scholarships is one of the eminent acts of this century and it readily suggests the arrangement of similar Scholarships for the people throughout every grade of all schools.

"I think the Provincial Government should not wait for some beneficent man to do in Ontario what Rhodes did for this Empire, but should grant funds for Scholarships throughout the whole school system of the Province."

Mr. J. A. Machado, General Manager of the American Bank Note Company, Ottawa, writes: "I was very glad to receive your circular letter of the 12th inst., as I have become convinced that the question of Technical Education is a most important one, and that its proper solution will be of very great benefit to Canada.

"Anyone who comes in contact with labour to-day soon becomes convinced of the following:—

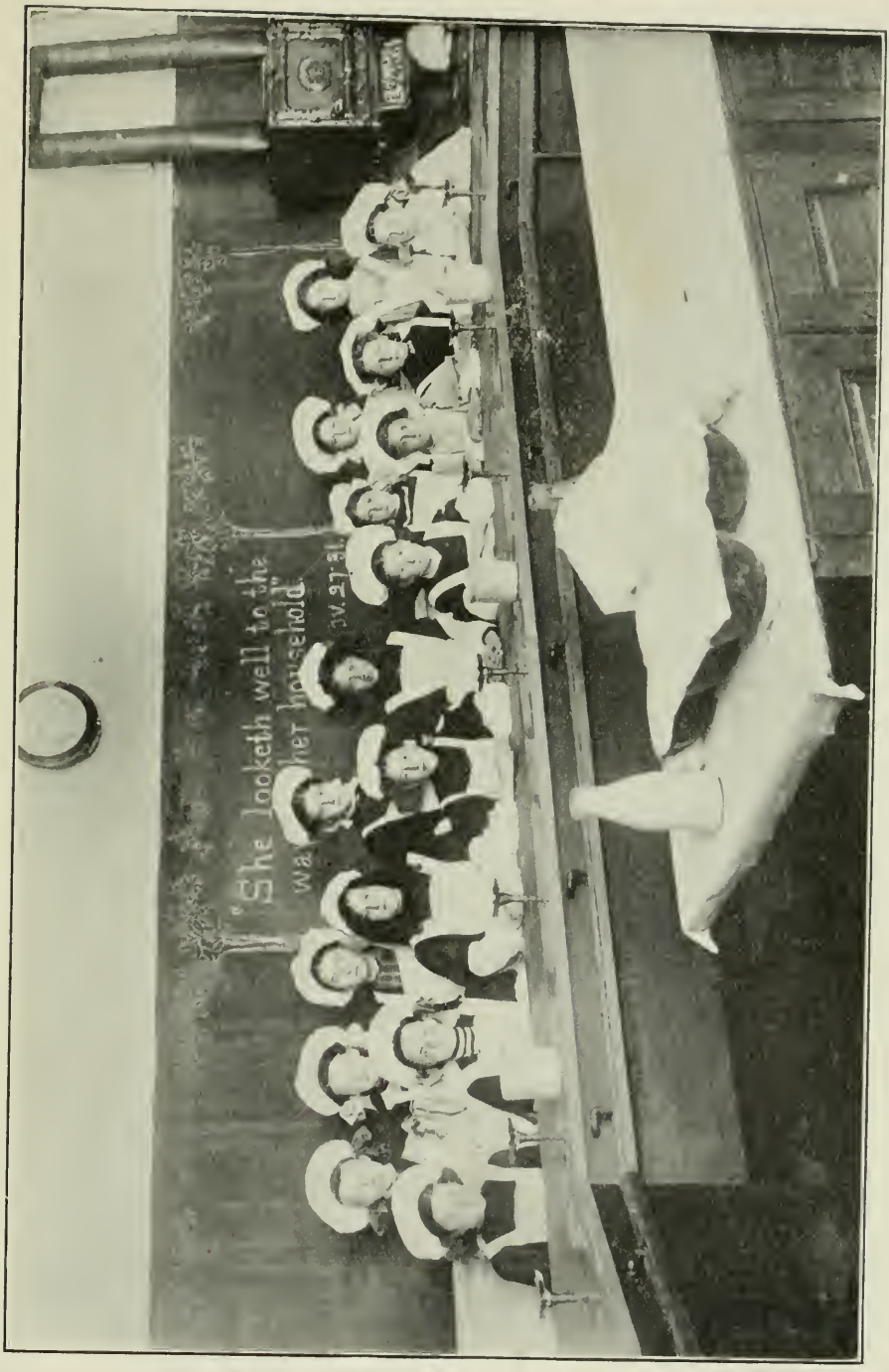
"That the average standard of workmanship is low.

"That the levelling influences of most unions tend to discourage individual effort toward a high standard of workmanship.

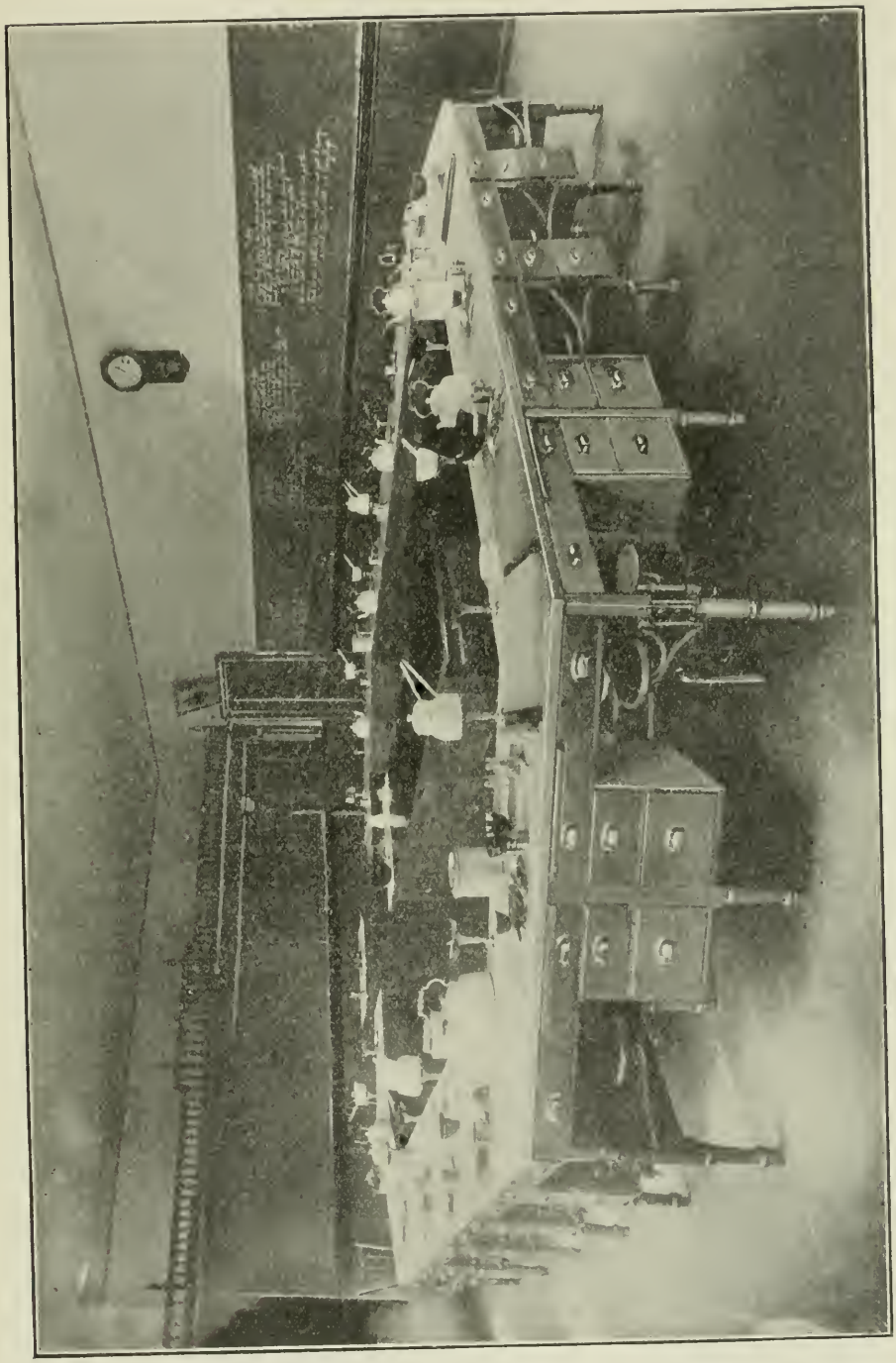
"That most unions restrict the number of apprentices.

"When you consider the efforts that Canada is making to induce immigration, and also what an immense asset skilled labour is to any country, it seems absolutely wrong that Canadian boys and young men should be deprived as they are of a chance to learn a trade.

"One has but to study the result of technical education in Germany to become convinced of the immense advantages that would accrue to Canada



Household Science Class, Public School, Toronto.



Household Science Room, Wellesley Public School, Toronto.

if the same general methods, modified to suit our special conditions, could be adopted here.

"I feel very strongly that a technical school in each of the larger centres of Ontario would prove of immense value within a very few years. From these schools manufacturers could obtain recruits for any and all vacancies in technical departments of work, and while the technical school could not in every case cover the special processes of every manufacturing business, they could give a general ground work of instruction in shop work and practical mechanics.

"I would be very glad to give any you information in my power, or to help this matter along in any way that I can, feeling as strongly as I do that it is of very great importance to the industrial development of Ontario and of Canada."

The Taylor Forbes Company, Guelph, writes in part as follows:

"Our opinion is that every boy who is inclined in any mechanical way should have an opportunity to pursue his inclinations, and learn what he can in this direction, and if necessary to do so, coupled with his regular day school studies.

"We find that boys to-day have absolutely no knowledge of either size or form—consequently 99 per cent. of them have their minds totally bent in the direction of clerical work, and in fact, so far as our district is concerned we have yet to find 1 per cent. who have the least inclination towards Mechanical work in its highest form.

"To cover the ground as to form, extent and direction with such education is a long subject, but briefly, we submit that the form should be in every line of mechanics—the extent so far as the Government can possibly afford and the direction should be on exactly the same lines as is carried out in Germany where the best educational schools in the world exist. It is a well known fact that when you get a German mechanic he knows his business."

Mr. J. P. Murray, Director of The Toronto Carpet Manufacturing Co., writes:

"We think schools should be opened in the small towns for the benefit of the youth of the district whose desire to manufacture exceeds the wish to farm, or who are associated with some nearby mill or factory.

"The Public Schools which now exist and the local mills or factories could be used, and be supplied by a qualified floating teaching staff, supplemented by young men from the local manufacturing industry. This would enable theoretic and practical instruction to be given and to a degree—more or less—assist in keeping the country youth from flocking to the cities.

"The industries of the localities will show the kind of instructors needed, and the extent to which effort should be made to supply tuition.

"In the more largely populated towns and cities, special school buildings and machinery equipment should be supplied to meet the requirements of the district. The equipment should embrace the necessaries to teach trades, practically. By 'trades' we do not confine our meaning to 'building trades.'

"Not only would the need of our growing industries soon be relieved, by educated and intelligent help being supplied in all parts of the province, but in a short time a marked reduction will be seen in the numbers of young men arrested for crime.

"Referring to apprenticeship—Since modern ideas of manufacture have taken the place of the old methods, so also has the system of apprenticeship differed from that of by-gone days. To-day owing to the independent ideas that prevail, it is difficult to get youth to bind itself in apprenticeship. Then, foremen, in factories keep urging workmen to produce output, so no time can be spared to teach a beginner.

"For want of knowledge as to what he is doing, a lack of interest occurs, and with indifference to his work, the only thought is for more money. Not being capable of earning more in the shop he is in, he accepts work in another trade wanting 'apprentices' and repeats his experience at 50 cents or a dollar a week more, until he is too old to be an apprentice. He has not learned anything and when he should have been earning $30.00 a week owing to educated ability, he works for the wage set by the union or trade.

"These are our ideas about 'apprenticeship' as it is to-day.

"In our industry we would prefer to have our youngest help attending a school where they can learn the work in a practical way and the theory and science at the same time. A certain knowledge of wools and of the different processes through which they go to produce a fabric.

"We do not think too high a curriculum should be introduced for beginners, because a real interest must first be formed and then greater knowledge will be sought.

"The lads to-day who are the ones we want, will not apprentice themselves, so with us, we have no proper apprentices though we have what are called 'learners.'

Mr. J. S. McCannell, Managing Director of the Milton Pressed Brick Co., writes:

"Your favour of Nov. 12th received enquiring as to the form technical education should take in the province. This is a matter which was gone into very thoroughly by a committee sent by the Ontario Government to Columbus, Ohio, this summer. The report presented by this committee was very full and covers the ground more thoroughly than we can explain it to you.

"Regarding the training of apprentices in our industry, we usually have to break in green men and train them up through practical experience. In a great many cases in our industry men who were thoroughly experienced in their work would no doubt be glad to take a technical course to assist them in understanding the reason why certain results were produced. The pressed brick and terra cotta business is only a very small field in the line of the clay industries which might be developed throughout the country. There is a vast field for pottery, tiles, porcelain and other lines of clay products which could be developed in our country.

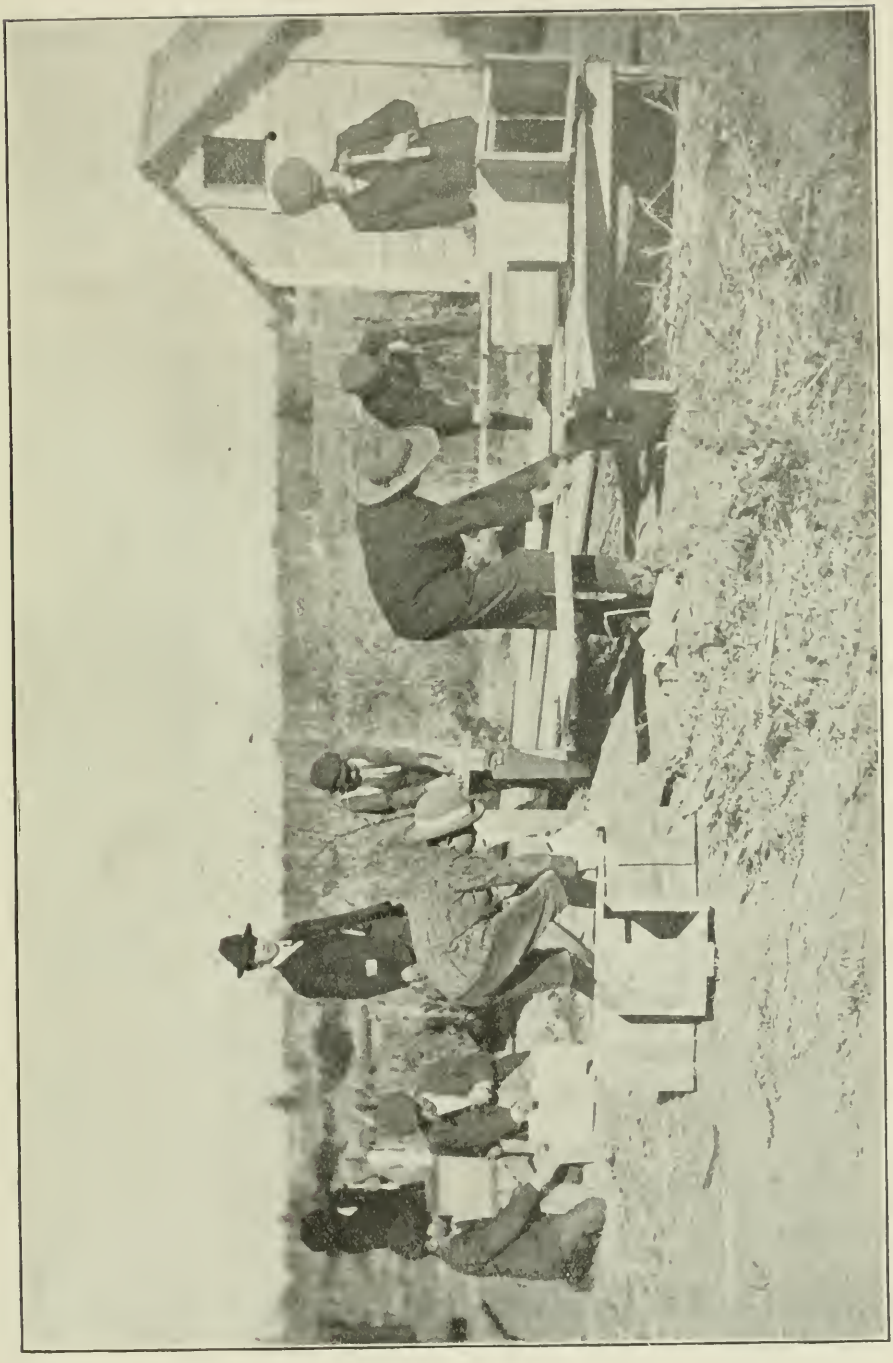
"It is felt by the clay workers that if such a school were established in Ontario in connection with the School of Science that it would be only a question of a very short time until the school would be well patronized. As to the needs of the school, we have no doubt that your Minister will agree with us that there is a great need for it and any expense in the matter will be fully justified and endorsed by the electors of this country."

The Secretary-Treasurer of the Eclipse Whitewear Co., Toronto, writes:

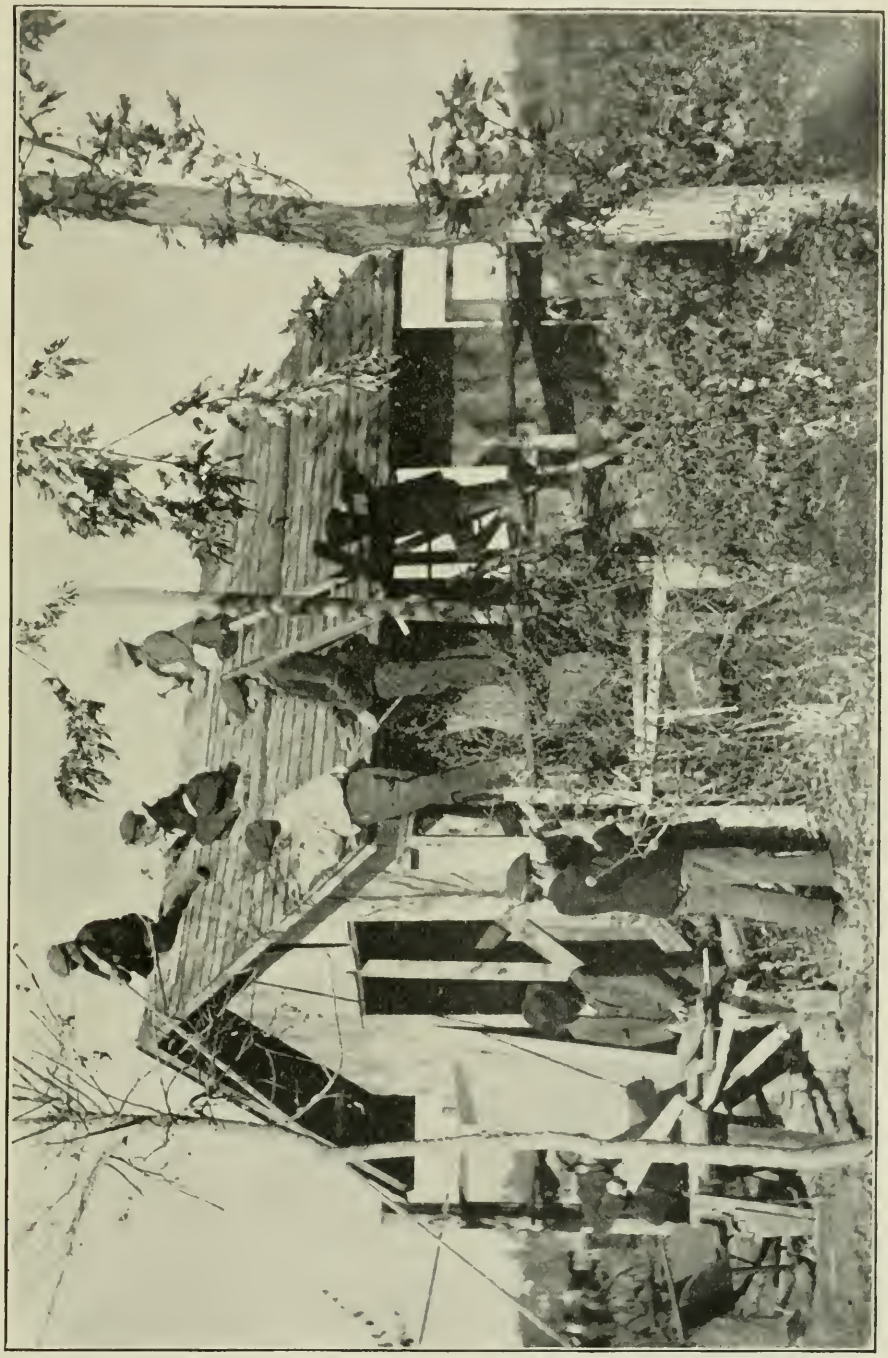
"We favor the establishment of Manual Training, Trade and Technical Schools in our Province, believing they will prove of general advantage in every industry, alike to employers and employees.

"So far as we can judge there is at present great need for the manual training of both sexes, since a large proportion of those applying for work have little or no dexterity, such as would be acquired at schools where this instruction is given.

"The training should be of a distinctly common-sense and practical nature, the object being to serve some immediately useful purpose, as well as to train the students in habits of close attention to the work in hand, to develop their judgment and reasoning, and to train their hands to some degree at least of deftness and skill. Even if the training were not identical with the work to be performed in our factory, we believe it would prove of



Rural School, Manual Training, Colorado.



Rural School Manual Training, Colorado.

much value to our employees by generally fitting them to make more rapid progress than would otherwise be possible.

"We think the best plan would be to establish manual training departments in connection with our public schools, for then the training of mind and hand could proceed simultaneously. Under such a plan a large percentage of scholars upon leaving school should not only be well equipped with a knowledge of the three R's, so essential to their success in after life, but they should be immediately able to earn enough for their support.

"For those desiring to take up the more advanced branches of manual training, continuation classes might be formed as an adjunct to the night school. This would afford an opportunity to all our boys and girls, to factory workers as well as day scholars, to indulge their ambition to become familiar with the use of tools. It would enable them to acquire a greater degree of dexterity, which would make them increasingly useful to their employers, and consequently less dependent for their livelihood upon the occupation to which they might first have turned their attention.

"By following such a course of general instruction in manual training, the worker should be able to make speedy progress as soon as he engaged in any regular occupation, and with the aid of a little specialized instruction from his foreman could rapidly develop into a skilled operator.

"In our industry there is a permanent demand for skilled labour and for many years we have employed a teacher to assist beginners.

"In other occupations where a three or four year apprenticeship is required, to qualify a workman as a full-fledged mechanic, a Trade School is not only a desideratum, but an absolute necessity if Canadian industrial development is to proceed unchecked. Compared with other countries Canada is woefully lacking in institutions where a man can be taught an occupation that will earn him his daily bread, and we believe it is vitally important that a beginning should be made at once to improve our educational facilities in this direction.

"As it is manifestly impossible to establish at once schools covering every department of labour, we think it would be fair to first consider those industries that at present can secure their skilled labour only in foreign countries, and those in which there is the greatest general need of workers. By following this course the speediest advantage will accrue alike to employers and employees.

"Night schools would be of great benefit to many who could not otherwise avail themselves of the advantage offered, and the experience of Technical Schools elsewhere proves that many of the most successful workers are graduates of night classes.

"Trade Schools should be located as far as possible at the natural centres of industry, and their character should conform to the character of the industry or industries indigenous to the locality. A school of mining at Sudbury and a textile school at Almonte would both be of inestimable benefit to their respective localities, but practically worthless if the order were transposed. Adherence to this principle would serve the two-fold object of providing employers with the skilled help needed in their industries and acquainting students with the practical carrying on of the industry in which they are most likely to find employment. In order that schools might above all be practical and closely in touch with the business needs and life of our Province, it may be found desirable to have an Advisory Board in connection with each school composed of representative business men from the several industries interested. This would be of most value during the formative period of the schools.

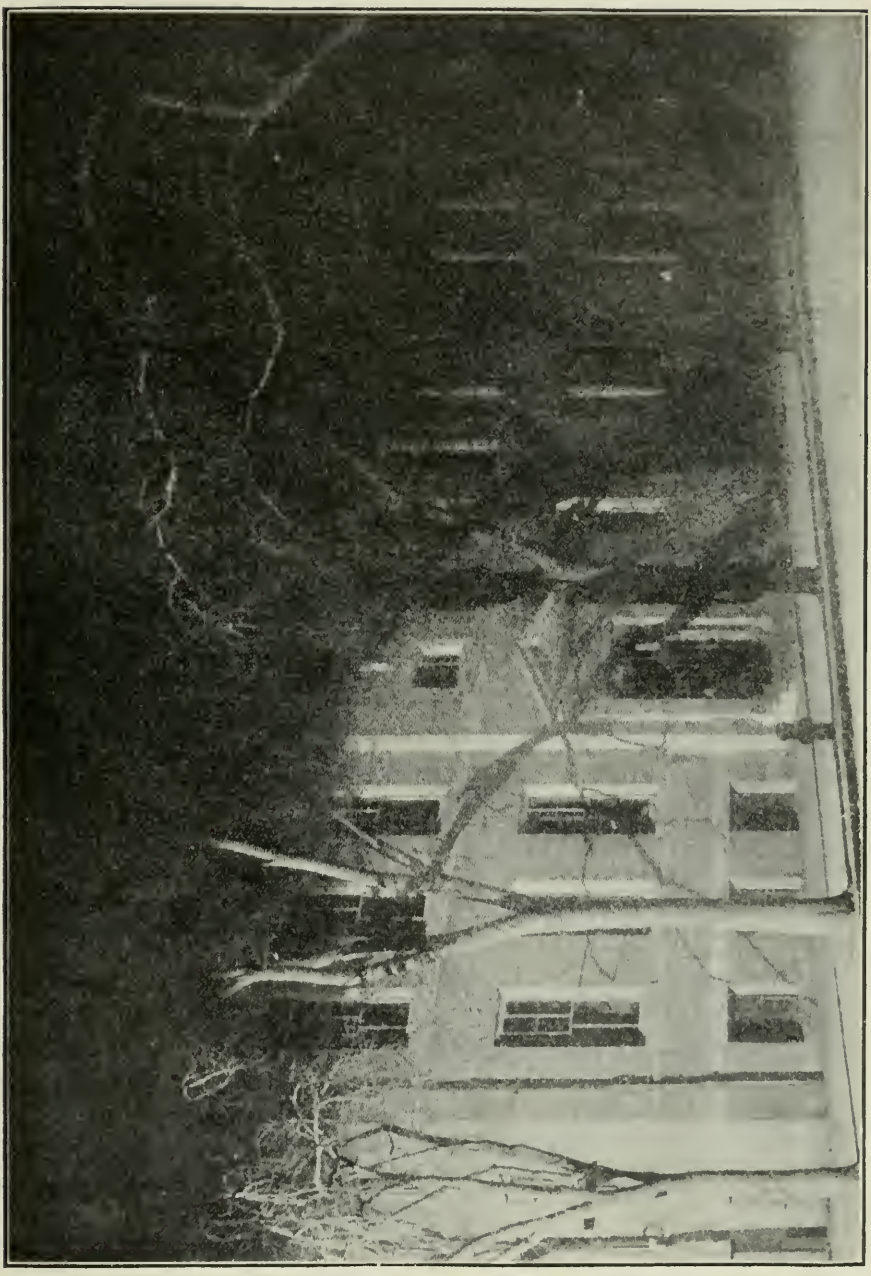
"Any system of Technical Education would be incomplete which did not provide for the instruction of those wishing to go on with advanced courses in chemistry and applied science, including civil, hydraulic, electrical, mechanical and mining engineering, architecture, etc. This would involve the establishment of Technical High Schools and Colleges, attached to which there should be departments of research where the student could carry on investigations on his own account and where opportunities would be given the manufacturer to solve the problems which confront him from time to time in connection with the utilization of waste.

"In the larger centres of population, museums of applied arts and science somewhat similar in character to the South Kensington Museum, London, would be of great value to the students."

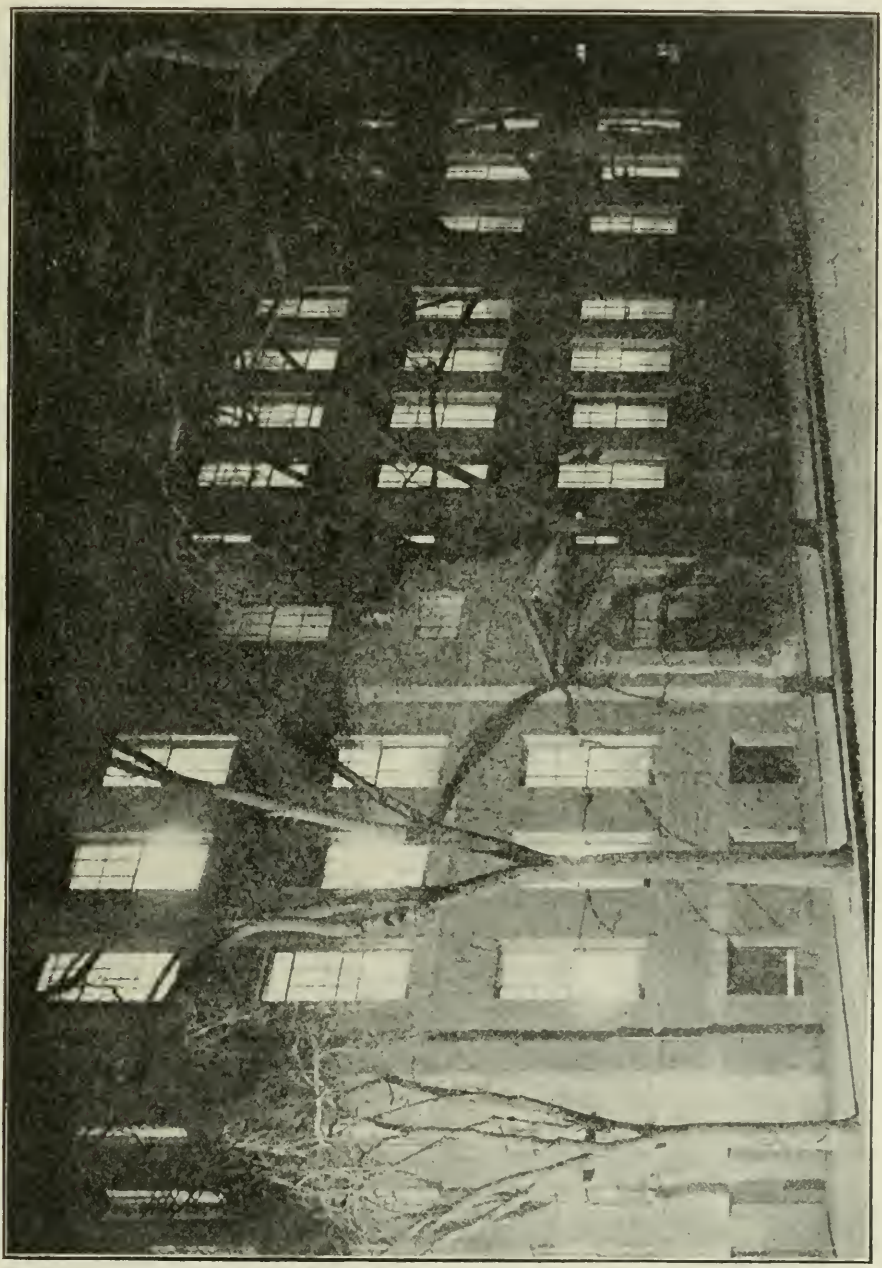
It will be seen from the above letters that there is a remarkable consensus of opinion on all sides as to general principles, and as there is such almost unanimous agreement upon essentials it should not be a difficult matter to agree upon working details. The writers make a number of valuable points and there is a sufficient number of men intensely interested in the subject of industrial education to form the nucleus of what would be an influential organization: "The Canadian Society for the Promotion of Industrial Education."

Two valuable suggestions are made in the above letters, amongst a number of others, one referring to the institution of a system of scholarships and the other, the establishment of industrial art museums. An illustration is given of the valuable scholarship scheme of the Manchester Committee of Education. It will be seen by the chart that from the primary elementary schools of that city, a student can gain entrance to every grade of school, finally entering the University. The scheme is sufficiently flexible to enable a student to specialize along any line he may desire. Eighty bursaries are offered to boys and two hundred to girls wishing to become teachers. These are tenable for two years being of the value of $75 and $100 and $50 and $75 respectively. The total number of scholarships offered under this Committee is over five hundred. In previous reports attention has been directed to the immense importance of industrial art museums. The greatest museum of this character, in the world is unquestionably the Victoria and Albert Museum, South Kensington, London, England; this has been well described as "the Power House of British Art Educational Progress." Though this is situated in London its advantages are by no means confined to the Metropolis. Specimens of its collections are constantly being sent to every corner of the British Isles and these are changed as often as required. The influence exerted upon practical industry by these travelling exhibits is incalculable.

"The little thatched village of Winstead lies down in the west country of Devon. To it the South Kensington authorities in 1903 sent a choice, but not extensive, collection of textiles, laces and other similar art products. They were on view before the students of that little art class, maintained under the picturesque roof of one of those tiny cottages. In the fall in London, at the exhibition of students' work held annually in the Metropolis, the judges representing some of the best minds of England, gave one of the highest awards to a girl student working quietly, but so earnestly in this same little provincial Winstead. Truly the great Victoria and Albert Museum, which the late Queen and the Prince Consort so successfully established, casts its bread upon the waters, and it comes back after many days." Here is a grand opportunity for a man of wealth and foresight to earn everlasting gratitude from the workers of this Dominion by the endowment of a



A Neglected Opportunity.



An Educational Centre.

museum of industrial art which would be a standing exhibition of the capabilities, methods and triumphs of skilled and educated labour. Probably the greatest writer on the subject of Art said: "The entire validity of art depends either on it being full of truth or full of use, and however pleasant, wonderful or impressive it may be in itself, it must yet be of inferior kind, and tend to deeper inferiority, unless it has clearly one of these main objects, either to state a true thing or to adorn a serviceable one. It must never exist alone—never in itself—it exists rightly only when it is the means of knowledge or the grace of agency for life." The functions of the museum in connection with all adequate efforts at art industrial training are recognized by every great institution devoted to that end. Manchester School of Art and Technology, Pratt Institute, Brooklyn, Drexel Institute, Philadelphia, all have their great museums, while the same holds true on the continent of Europe. The object in establishing these museums, has been to collect the best obtainable specimens of handicraft, placing side by side with them the crude materials from which they were fashioned and to show the processes through which the various articles passed from their original state to the final object of beauty. The museum also serves to furnish specimens not only of beauty but of practical utility for training the eye in the principles of form, design, colour and decoration. According to a Bulletin issued by the United States Bureau of Labour, a labour museum was opened at Hull House, Chicago, in November, 1900, for the purpose of exhibiting industrial processes in various stages of their evolution, and thus offering a sort of education in industrial history, in the form in which it would be most easily comprehended, and at the same time emphasizing the dignity and importance of labour. The bulletin states that the textile department is the more fully equipped and historically complete part of the museum. The district is inhabited by foreigners of many nationalities. Among the older women are many who were accustomed in their native lands to spin and weave the clothing for their families, and some of these brought with them to America their distaffs and spinning wheels. Much of the equipment of the Museum was therefore at hand. On Saturday evenings the women carry on in the museums the processes they were accustomed to in their far away homes. The primitive hand spindle as used before the introduction of spinning wheels is employed in somewhat different forms by Italians, Greeks, Russians and Syrians. Various kinds of spinning wheels and reels are also shown in operation. Wool, cotton, flax and silk are put through one process after another from scouring, dyeing and combing, to weaving. The dye room is equipped with porcelain tubs, but the dyes used are of vegetable origin. The museum has a primitive Navajo loom, a stocking loom, a Swedish pattern loom, and a fly shuttle, Jacquard and power looms, the latter operated by electricity. This labour museum is not only a museum, but it is also a workshop. In addition to the Saturday evening exhibitions a number of Irish and Italian women use the spinning wheels and looms during the week.

Reference has been made to the scholarships and bursaries offered by the Manchester Educational Committee. That Committee has the management and direction of what may be almost considered as almost a perfect institution for technical and industrial training,—perfect in its organization, equipment, management, and adaptability to the needs of the district in which it is placed. There are really two institutions known as the Municipal School of Technology and the Municipal School of Art. We are so accustomed to point to the United States and Germany as being the countries in which technical education is most strongly developed that one

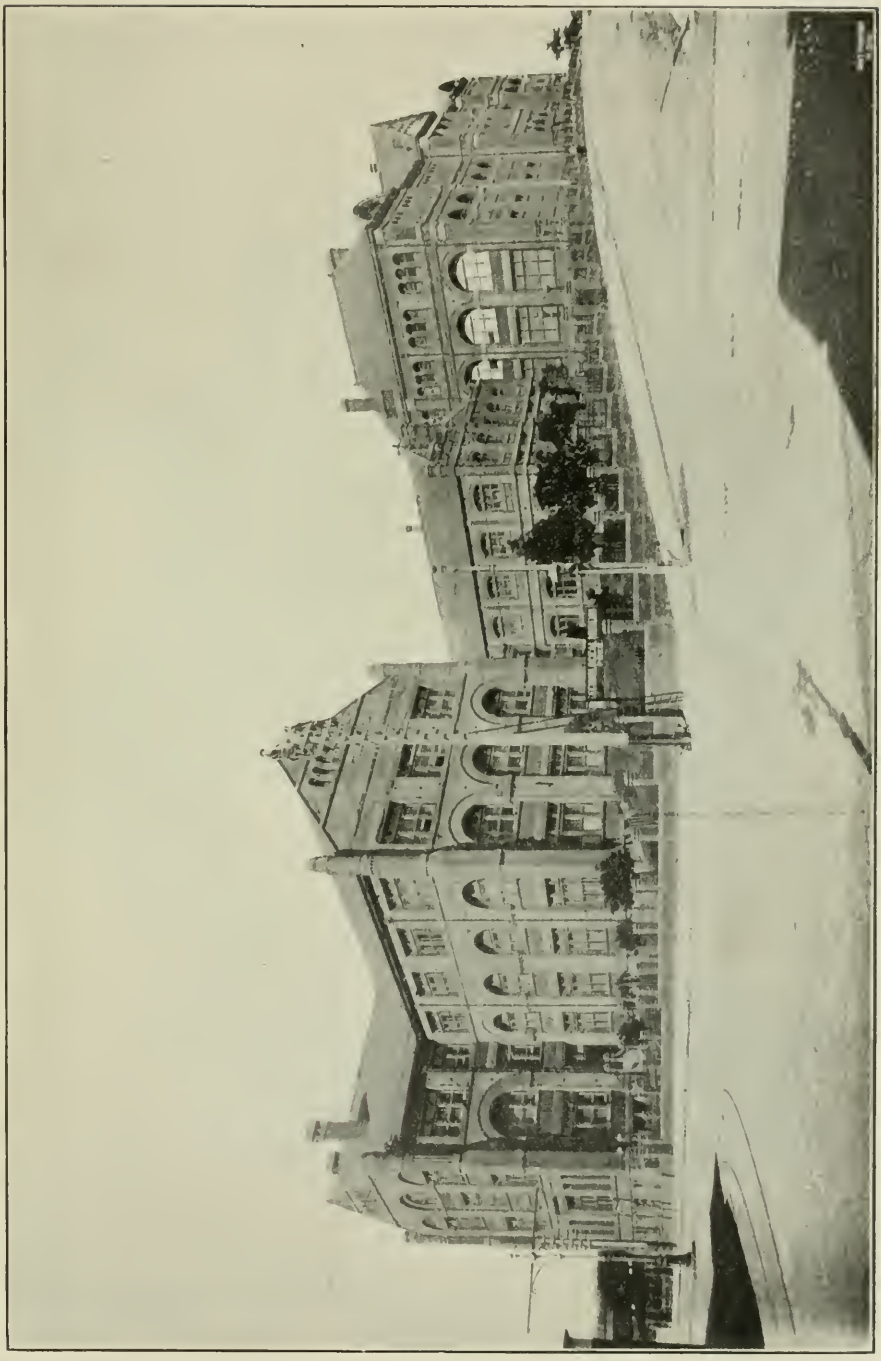
is apt to forget that the mother country is in some respects at least equal to those countries and it is a delight to be able to point to a school in the old country that cannot be excelled in any other part of the world. The particulars I give are gathered from material supplied to me by Mr. J. H. Reynolds, the Principal of the School and Director of Technical Education. Mr. Reynolds has travelled extensively and has incorporated into the school the best foreign practice with what he considers the means for giving that training needed by the citizens of Manchester and the surrounding district.

The object of the school is, as its title denotes, to provide instruction and training in the principles of science in their application to the industrial arts with a view to a right understanding of the foundation upon which these arts rest and to promote their effective development. This school is the direct outcome of the Mechanics institution. This form of educational effort was for nearly eighty years of the nineteenth century the only means whereby the workers, and a large part of the middle classes, found the opportunity of continuing their education or of making up the serious deficiencies which resulted from the miserably inadequate provision of day school education that characterised the years preceding the almost revolutionary enactment of 1870.

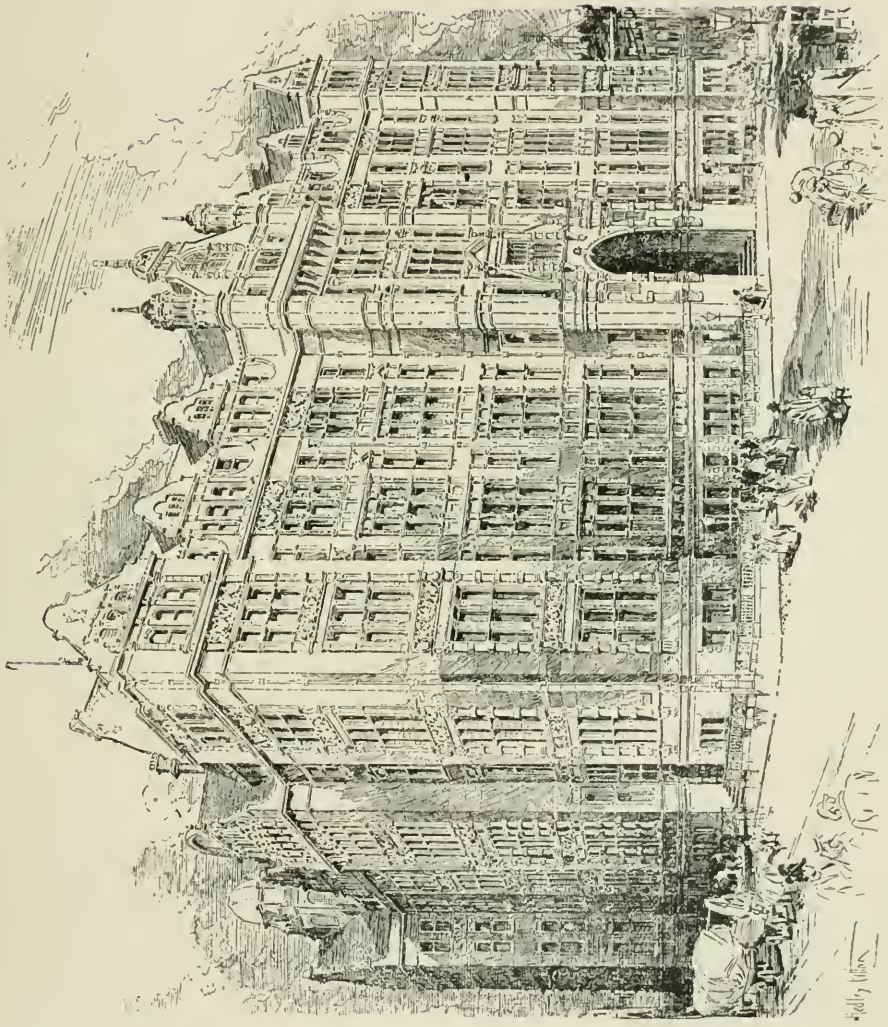
It will be remembered that Mechanics' institutes were once established in many parts of Ontario and a Superintendent of these was appointed by the Government. So far the Canadian and English practice coincide but there the parallellism ceases. In Ontario they died the death and nothing as yet, has taken their place. In England, they also died, but from their ashes have arisen many technical and art schools dotted all over the British Isles. The first building designed expressly for the purposes of a Mechanics' Institute was erected in Manchester in 1824, and this building still exists. Notwithstanding the beneficial effects of these efforts it must be admitted that they failed to achieve the objects for which they were founded—the technical instruction of artisans, etc. in the arts and industries. This arose mainly from the fact that the population was not sufficiently educated to be able to take advantage of the opportunities offered. Instead of being able to give instruction in Science and Art they were compelled to offer lessons in the merest rudiments of elementary education to adults. In 1889, the Technical Instruction Act gave local authorities power to rate their areas for the purposes of Technical Education and of this power Manchester was the second city in the kingdom to avail itself. An Act of 1890 placed at the disposal of local authorities an Imperial grant of nearly £800,000 per annum ($4,000,000) for the same purpose. In 1895, the erection of the present school was begun and from that time until the end of 1902, the building was in course of erection and equipping, being formally opened by the then Prime Minister (The Right Honourable A. J. Balfour, M.P.). In the course of his address he referred to the school in the following terms, "This building is perhaps the greatest fruit of its kind, the greatest fruit of this kind of municipal enterprise in this country. Nobody can go over this building, observe its equipment, study even in the most cursory manner the care which has been devoted to it, without feeling that the Corporation of this great city have set a great example worthy of the place they hold in Lancashire, worthy of the place they hold in Great Britain."

The courses of instruction of the school are directed more especially to the requirements of the industries of South-East Lancashire, of which Manchester is the commercial centre.

The school accomplishes its purpose by means of lectures, laboratory and shop work exercises, together with scientific research directed to the solution of industrial problems.



Technological Museum and Technological College, Sydney, N.S.W.



Municipal Technical School, Manchester, Eng.

The essential aim of the instruction is the training of faculty through a systematic course of sound theoretical study, and the development of resourcefulness and habits of self-reliance by means of an exact, thorough, progressive course of laboratory and shop work.

The school offers to day students who have reached their sixteenth year the folowing courses, each of three years' duration.

1. Mechanical Engineering.
2. Electrical Engineering and Technical Physics.
3. Municipal and Sanitary Engineering.
4. Applied Chemistry.
   - *a*. General Chemical Technology.
   - *b*. Chemistry of Textiles (Bleaching, Dyeing, Printing, and Finishing).
   - *c*. Manufacture of Paper.
   - *d*. Metallurgy and Assaying.
   - *e*. Brewing.
   - *f*. Electro-Chemistry.
5. Manufacture of Textiles.
6. Photography and the Printing Crafts.
7. Architecture and the Building Trades.

There is also a special day course for selected apprentices in the employ of engineering firms.

The building is six stories in height and covers a plot of land 6,400 square yards in area. The corridors on each floor are lit from two spacious internal areas, whilst the class rooms and laboratories receive direct external light from the surrounding streets. The chief entrance leads to a spacious hall (laid in marble tiles and furnished with fine examples of antique sculpture) and thence to the main staircase. There are also two students' staircases fitted with hydraulic and electric elevators to afford ready access to the rooms on each floor. On the left of the main entrance are the administrative offices, comprising the general office, the Principal's rooms, and the council chamber, the remainder of the ground floor being allotted to the various class rooms and laboratories connected with the physics and textile departments.

The principal feature of the first floor is the large central hall for examinations or public lectures, and adjoining it are the library and reading rooms, a room for the meetings of scientific societies, laboratories and class and lecture rooms for mathematics and for electrical, sanitary and mechanical engineering.

The second floor contains spacious lecture rooms, drawing rooms and laboratories in connection with engineering, architecture and the building trades, the photographic and printing crafts, and electrical engineering. An experimental bakery and the students' common room are also placed on this floor. The organic and inorganic chemical laboratories, the principal chemical lecture theatre, laboratories for metallurgy and brewing, and the woodworking, plumbing, and sanitary engineering workshops are placed upon the third floor. On the fourth floor are arranged the dyeing laboratories, an experimental brewhouse, a well equipped gymnasium, a workshop for house-painters and decorators and rooms for bookbinding and lithographic drawing.

Above the fourth floor at the north-east corner of the building is an astronomical observatory fitted with an equatorial telescope.

The basement is one great workshop and laboratory for spinning and weaving, and for mechanical and electrical engineering, including laboratories for experimental motors and dynamos, steam and gas engines, hydraulic appliances and materials testing.

The special course for engineers' apprentices is arranged to afford facilities for the instruction in special day classes of selected apprentices employed in engineering works. In order that the organization and business of the various works from which the apprentices are drawn may be interfered with as little as possible the classes comprised in the course, are held on Monday from 9 a.m. to 1 p.m. and from 2 p.m. to 6 p.m. throughout the whole session of forty weeks. The time thus arranged is equal to that given on four evenings per week in the evening classes, and the session is some ten weeks longer than the evening session. The student has the further advantage of being relieved from evening classes so that he has full opportunity to prepare the home-work and to do the reading required and under these circumstances can obtain a more extended and a more satisfactory course than the evening classes afford. The authorities of the school make themselves responsible to the employers who send their apprentices, for the due carrying out of the scheme, and notifies them at once of any absences or departure from the conditions laid down. Monthly reports are also furnished of the attendance and progress of the student. The fee for the complete course is about six dollars.

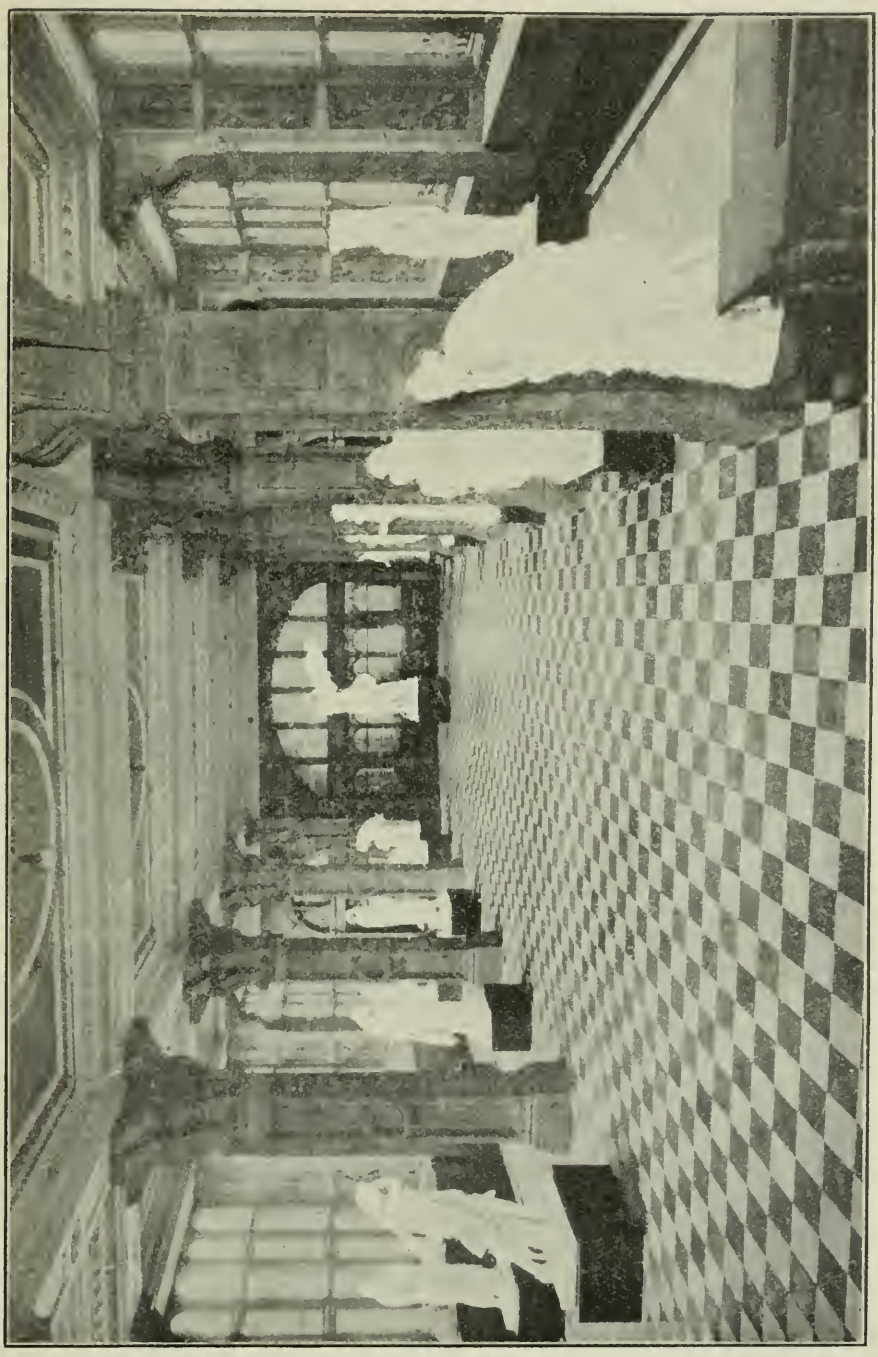
Manual Training classes are also held for teachers of public elementary schools. These are held on Friday evenings and Saturday mornings and have been established with a view of giving teachers, who are alone eligible to attend, a practical knowledge of the use of woodworking tools, of geometrical drawing, isometric projection, and of drawing to scale as applied to wood working, with the more especial object of enabling them to introduce manual training into elementary and secondary schools. The workshop is large, light, and exceptionally well fitted with benches and appliances for thirty students, each of whom is supplied with a locker and a complete set of tools. The course consists of thirty lessons of two and a half hours each, is carefully graduated and includes instruction in the nature, use and object of the tools and materials employed, and the best methods of preparing drawings, and in laying out the work, and in the application of descriptive geometry to woodwork. The course which lasts for two years prepares teachers for the final examination of the City and Guilds of London Institute. A similar course for teachers is also held in metal work.

Classes for women are given in theoretical and practical Dressmaking, plain and art Needlework and Millinery, and Household Science.

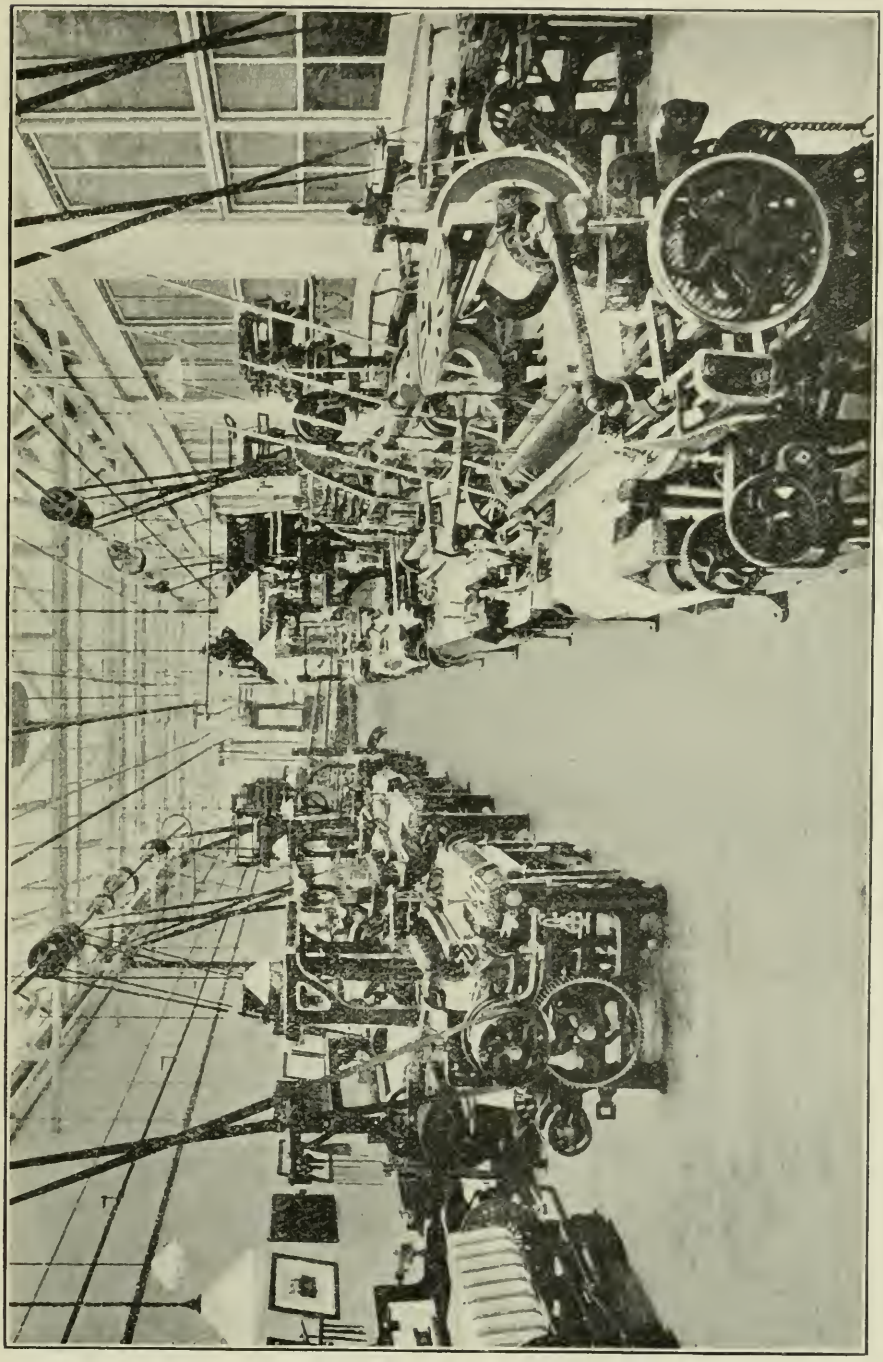
All the classes previously referred to are day classes and the number of students in 1906-7 was 651.

In the evening classes students are admitted on the express condition that they make the required attendances and sit for such examinations as may be arranged. As satisfactory progress in any of the subjects depends upon a reasonable amount of time being given each week to the preparation of exercises, it is a fundamental requirement that all evening students supply themselves with the school lecture note books and home work sheets which are to be carefully written up and presented periodically to the Lecturers and Instructors for examination. This requirement is not optional on the part of the student, but is an essential condition of entrance to and continuance in the classes.

The evening classes are divided into three branches: 1 Science; 2 Technology; 3 Art. The number of the students attending these during the last session was 5,267. With a view to preparing students for the more special courses, organized courses in elementary science have been arranged in six branch technical schools scattered throughout the city. The schools conducted by this Committee outside the schools of Technology and Art are as



Entrance Hall, Municipal Technical School, Manchester, Eng.



Main Weaving Shed, Municipal Technical School, Manchester, England.

follows:—Evening Continuation Schools, 77; Branch Technical Schools, 6; Branch Commercial Schools, 17; Institutes for Women and Girls, 8; Evening School of Commerce, 1; Central Institute for Women, 1; Teachers' Classes, 5; making a total of 115 institutions all contributing to the central schools of technology and art. The total number of the students in these schools was during the session 1906-7 more than 17,000. The School of Art occupies a specially constructed building. When the city of Boston set itself to reorganize its system of art instruction this was the school whose organization, equipment and efficiency was the text upon which it based its campaign, a reversal of the usual order of things which must be gratifying to every British subject.

Every advocate of technical education (myself included) has been in the habit of directing attention in season and out of season to Germany and the United States as being the countries in which this form of education is most largely developed and urging that their plans should be followed in this Province. It is high time we began to consider what the "mother country" has to show us in this respect. In a remarkable book "Industrial Efficiency" the author eloquently disputes the contention that these countries are ahead of England in many respects. He expresses the opinion that, in the provision of facilities for higher technical education for workmen engaged in manufacturing industries, England is far ahead of Germany and the United States but that in the use made of these facilities it is as yet inferior to both. The matter following is quoted from the book above referred to: "I pass on to England and in doing so wish to say with all possible emphasis that in no subject connected with this enquiry have I met with so much misapprehension or so much depreciation of native institutions. I should hesitate to say that the provision in England to-day is superior to that of Germany on the whole, but in some respects it certainly is. The two are however so different that comparison halts. There is a fundamental difference which can be put in this way. In Germany, as I have endeavoured to show, the technical schools supply the large industries mainly from above: they train men who have previously had a superior general education as heads, officials and experts. In England they supply mainly from below; they educate boys belonging to the working-classes—boys at work in the mill or at the forge—into foremen, overlookers, managers and experts. In Germany the real work of the technical schools is done in day classes; in England in evening ones.

"If actual workers are to go to school, not only must the classes be in the evening, but there must be a school in the place where they work and live; that is to say, technical schools must be generally, if not universally, diffused. In England they are; in Germany they are not. For instance, Düsseldorf is a large and important manufacturing town in which several industries are carried on. Over 10,000 men are engaged in the metal trades, which include engineering works of the first rank; some 3,000 hands in textiles; and glass, paper, and chemicals are also manufactured on a large scale. Yet it has no technical school at all, except for art trades. Students of engineering must go to Duisburg or Hagen; of textiles to Barmen, Crefeld or Gladbach. Again, one of the most important textile towns in Saxony is Zwickau, but it has no school. Students must go to Reichenbach, Glauchau or Chemnitz, which is impossible for working hands. Many similar instances might be named. In England I have been unable to find any such; every manufacturing town, even down to those with 20,000 inhabitants, has its own school, though it may be under the shadow of a big neighbour. Writers have urged this as a fault and have criticised the profusion in Lancashire, for example. Not content with a great technological college in Manchester,

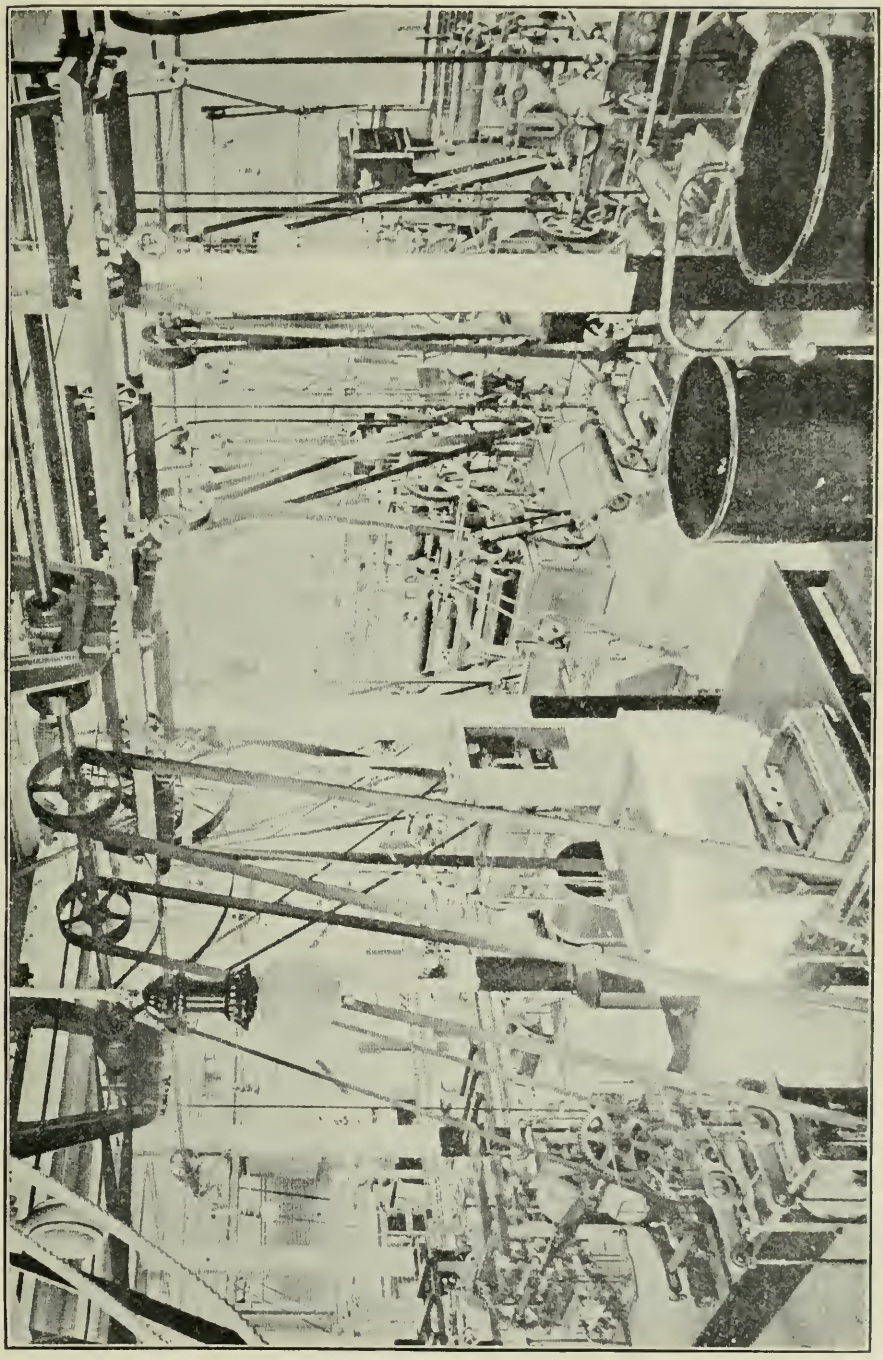
itself under the shadow of a modern university; not content with large technical schools in the other great towns—in Bolton, Oldham, Blackburn, Preston, Burnley, Bury, Rochdale, etc., etc.,—every little place must have its own in addition. There are nearly 40 schools in Lancashire that teach cotton-spinning and weaving, as well as other things. Most of the large towns teach mechanical engineering also. Similarly in South Staffordshire, instead of being content with Wolverhampton, all the smaller places round about have schools of their own for teaching metal work and the manufacture of iron and steel. So, too, in Yorkshire, and in the Northamptonshire boot and shoe district. In London the profusion is bewildering; there are about a score of polytechnics or technical institutes and a great number of other institutions.

"All this is not over-lapping or over-profusion, but absolutely necessary if working hands are to enjoy the advantages of technical instruction. The schools are not of course, all of equal value, and some are very humble affairs, but the best are equal to any and the least are superior to the little hand-loom weaving places which count among the textile schools of Germany and vastly superior to the "corresponding schools" of America. If any other country had the same provision it would be extolled by English writers and platform orators in season and out of season.

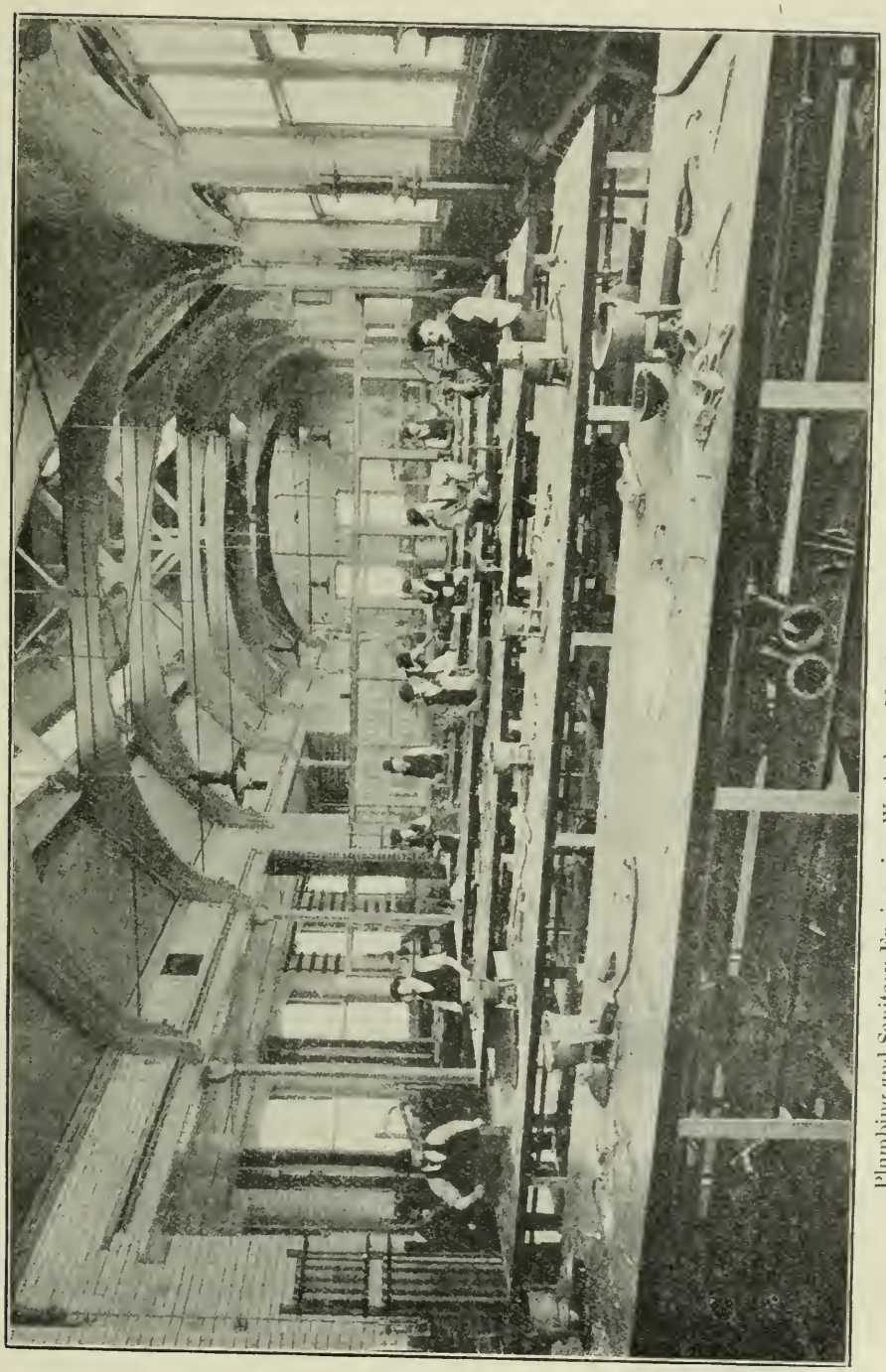
"The comparative merits of these English technical schools and the German ones to which they correspond (namely the middle schools described above) in regard to manufacturing industries may be a matter of opinion. The German ones are more centralised and specialised: the English more diffused and comprehensive. But I suppose that an ideal system would combine the merits of both, and that can be more readily accomplished from the English starting point. It is certainly easier to add special higher grade institutions to a mass of widely distributed popular ones than to create the latter; or rather—for this is really the way to put it—it is easier to provide for a comparatively small number of higher grade day students than to give the rank and file such opportunities as they have and use in England. When the superior students come forward they can be accommodated without difficulty. But apart from that I see great strength in the English system. I have a very firm belief in the capacity of our working-classes in the north. Their initiative, industry, and energy built up the great industrial edifice, and I see those qualities reflected to-day in the schools reared so quickly by local enterprise, and in the eager intelligent faces of the factory lads who throng the evening classes. A scene at Blackburn in particular is printed on my memory, though I have seen the like elsewhere. I was taken into a class-room where a class on pattern-making for weaving was going on. About seventy lads were present. They were so well dressed and superior in their appearance that I asked. 'Who are these boys?' 'They are working lads and sons of workingmen,' was the answer. Noting my surprise the teacher called out: 'All of you who go to work in the mill to-morrow at six, hold up your hands;' and all but ten held them up. As I say, sights like this can be seen in every large manufacturing town in England, but very rarely in Germany or in America.

"These young fellows are the pick of the working classes, the most intelligent, enterprising and ambitious. They do not intend to be workmen; they are qualifying for superior positions. I have found the technical schools universally regarded by trade unionists and intelligent workmen as 'stepping stones out of the mill.'

"Summing up this comparison we may say that while England has long been backward in technical education, it has of late years righted itself with so much energy that the provision from below is already greatly superior to



Interior of Dyehouse, Technical School, Manchester, Eng.



Plumbing and Sanitary Engineering Workshop, Municipal Technical School, Manchester, England.

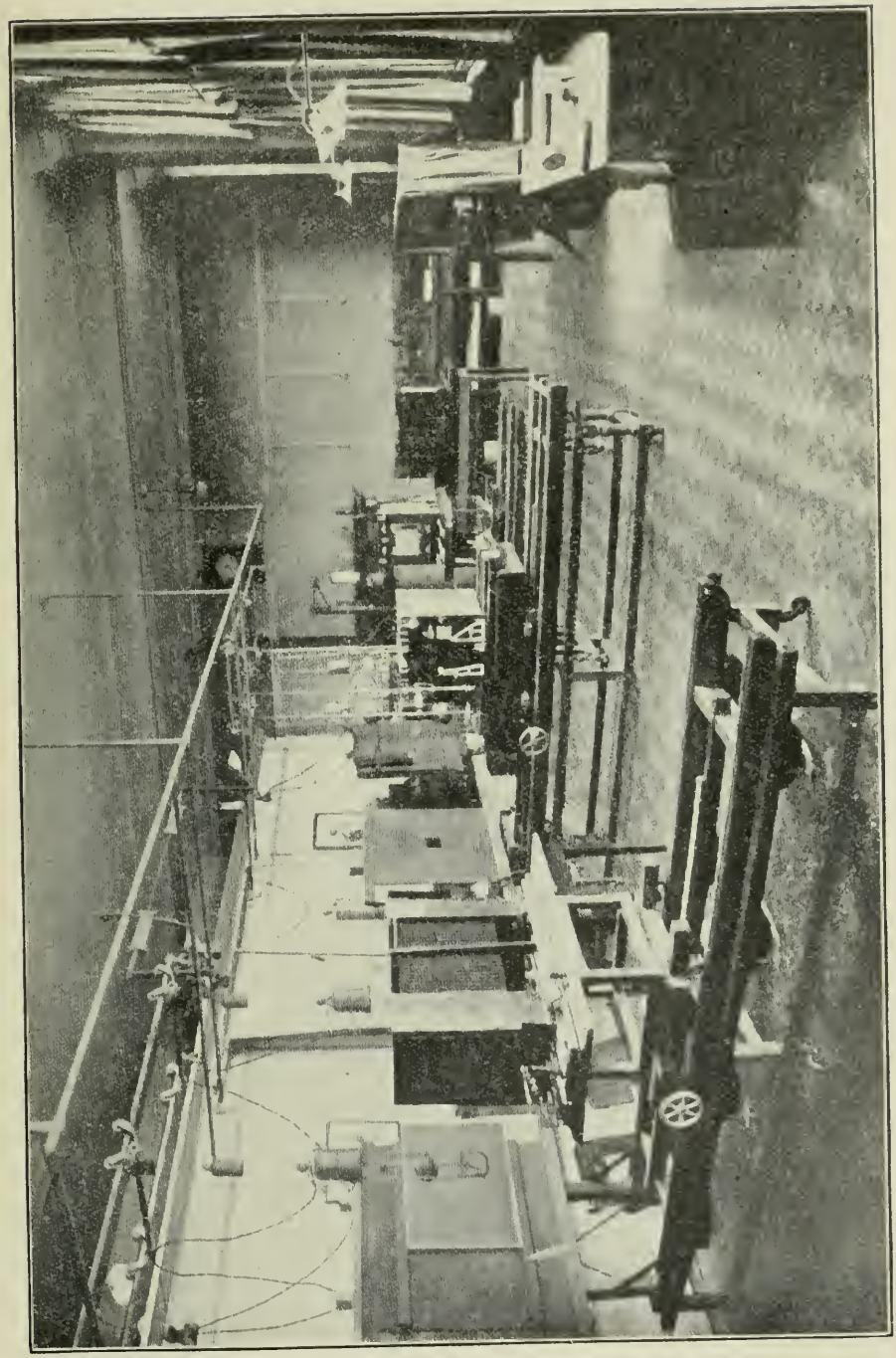
that of Germany and the provision from above has at least equal potentiality, if the same use is made of it. And that has begun. The demand is increasing and the influence beginning to tell, though it has not yet had time to produce effects comparable in magnitude with those of Germany, which has had a long start. The movement will unquestionably be assisted by the co-ordination of educational institutions under the Education Act of 1902, which places the general and technical schools under the same local administration. I have no doubt that in a few years technical education will be developed in England to a degree of completeness which cannot be matched in any other country. The great weakness at present has nothing to do with education, or at least with schooling. It is the fact that a very large proportion of boys never learn or attempt to pursue any trade at all. They follow the line of least resistance, and as soon as they are released from school—and often before—they begin to earn money by unskilled labour as errand boys, shop boys, van boys, newspaper boys, and other casual occupations. There is always a demand for their services, and the temptation is irresistible. Thus they grow up without any special knowledge or skill at all. As they grow older and cannot live on boys' wages they are thrust out by the constantly renewed supply of younger lads, and drift into the ranks of casual or inefficient labour. This touches the manufacturing industries but little, because in manufacturing as distinguished from trading towns, boys go into the works and factories and do acquire skill, though less thoroughly than in former times when apprenticeship was more general. The case is, therefore, somewhat of a digression from the strict point of view of this book. But it has such an important bearing on the general welfare of the community, and is really responsible for so much that is often attributed to want of technical education, that the mention of it is not irrelevant here. In a sense it is due to want of technical education; in the sense of training, that is to say, but not to the want of schools.

"After what has been said, the distinguishing features of technical education in the United States can be made clear by comparison in a short space. Broadly, it resembles the German more than the English system in that it supplies industries from above rather than below; but it possesses the merits of neither. It has not the specialisation and thoroughness of the one nor the general diffusion of the other. It is so unevenly distributed and so heterogeneous that classification is hardly possible. There are schools corresponding to all the three German types distinguished above, a few corresponding to the English type, and some of a novel type. The most important are the high schools, otherwise institutes of technology and technical departments of universities and colleges. They are very numerous and are attended by a large aggregate number of students. The studies preparatory to industrial occupations are classified under the head of several sorts of engineering—namely, civil, chemical, electrical, irrigation, mechanical, metallurgical, mining, marine, sanitary, and textile. Out of this list those which have to do with manufactures are, I presume, chemical, electrical, mechanical, metallurgical and textile engineering, though I am not at all sure what is meant by chemical and textile engineering. In 1901, mechanical engineering was taught in 85 institutions to 5,623 students; electrical engineering to 2,696 students in 79 institutions; chemical engineering to 536 students in 15 institutions; and textile engineering to 234 students in 4 institutions; making a total of 9,089 students. If civil and mining engineering be added the total is 14,130. These are very large numbers, and they testify to a great demand for college-trained men. That is, in fact, the most salient feature of technical education in the States.

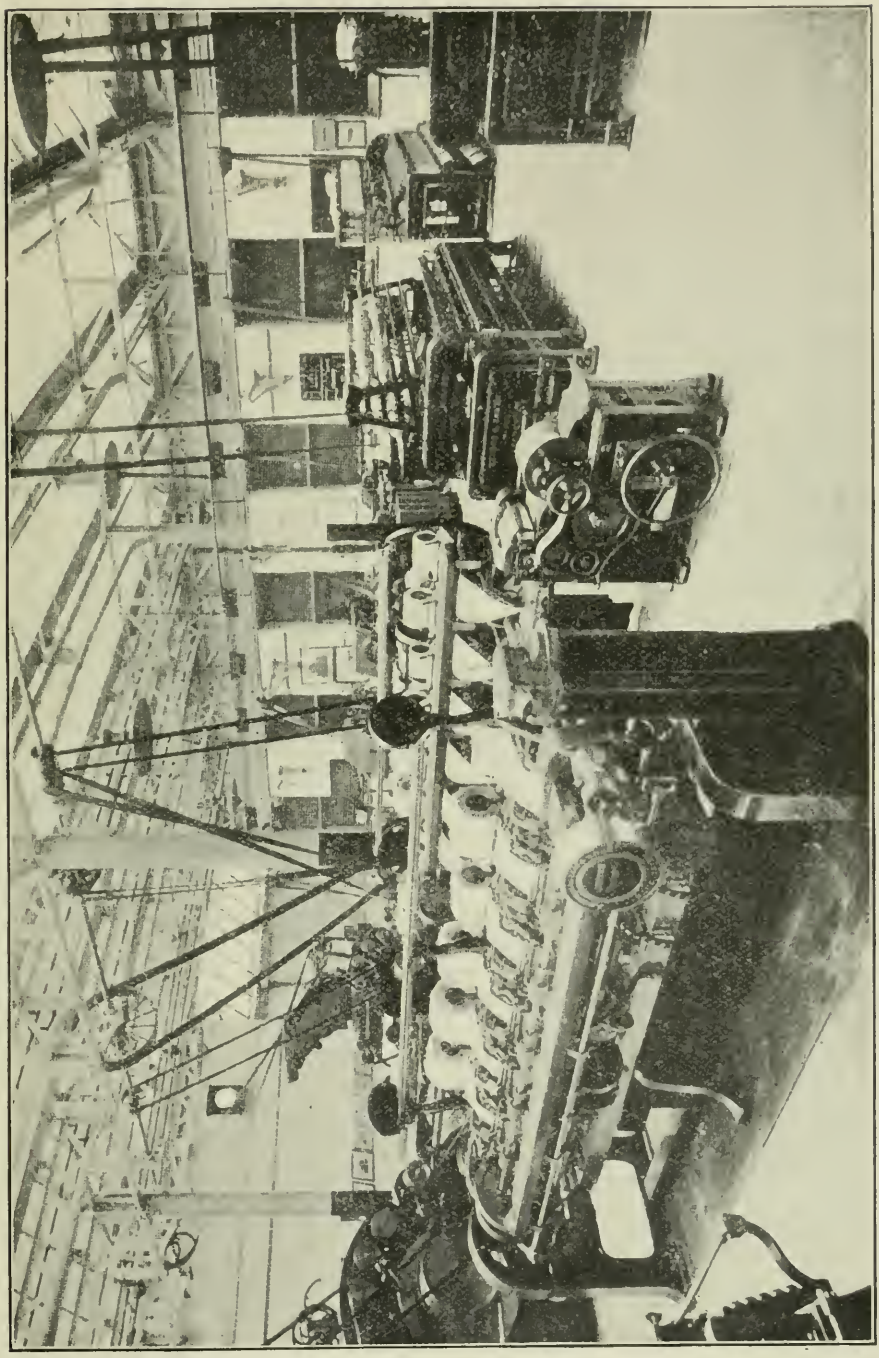
"There seems to be a general opinion that technical education has not had much to do with the industrial expansion of the United States in the past. It has certainly played a very much smaller part than in Germany. Most of the large concerns were built by men of energy who had little or no schooling, and rose from the ranks. The present provision has come since the great railway and industrial development, and in consequence of it. The rapid expansion caused a demand for trained men, who could not be supplied fast enough. This, I think accounts for what I have called the supply from above. There was an opening for men of good education, and the colleges hastened to fill it. The pace has continually increased, and the large corporations sometimes 'order' men by the dozen. When I was at the Technological Institute at Boston I was told that the United States Steel Corporation had just ordered a batch of fifty; they go to the works on trial for a year. The large numbers turned out in recent years must be having a considerable effect. Yet, I see that in 1900 one-fourth of the total number of 'manufacturers and officials' engaged in manufacturing and mechanical occupations were foreigners. I think this highly significant fact must have escaped the attention of those who think that Europe has much to learn from America in the matter. The myth of 'the American workman' and his superior skill has been dealt with more than once. Technical education, high and low, appears to suffer from the national defect of want of thoroughness, which arises from the craving for short cuts. Hence the correspondence schools and the attempt to teach industries in school without practical experience. Opinion may be divided on the question whether technical schooling ought to be preceded, accompanied, or followed by practical training. I can only form a second-hand judgment derived from men of experience, but their verdict is decisive. I have asked the question of a great many leading manufacturers and managers in all three countries, and they were unanimous in condemning school training without practical experience. In the German technical schools previous practical knowledge is usually insisted on, for a full course of study. In America the theoretical study precedes practical work, and the complaint of manufacturers is that it often unfits men for the workshop. Some high authorities have found the American training shallow and superficial. This coincides with the experience of the Rhodes scholars at Oxford in other studies. American university gradutes have been found less well grounded than English schoolboys of the same class.

"From a broad survey of the educational field three salient results emerge like peaks rising from the plain, and mark the three countries—in America commercial push, in Germany the careful performance of a set task, in England a traditional standard of character and conduct. The last is the contribution of the 'public' schools, which are still the most valuable, as they are the most distinctive, educational asset we possess. The relative value of the three will depend on the point of view, and of course from the industrial standpoint the last is hardly of any value at all; but in other fields it is supremely valuable. And when you have a good thing keep it; supplement it, add to it by all means, but keep it. The counsel which I see daily expounded by writers on education, that in order to get something that you have not you must begin by destroying something that you have, is a counsel of blindness and folly."

The quotation is lengthy but it is exceedingly pertinent. In every part of the world increasing attention is being paid to systems of education adopted in others and this though decidedly helpful and beneficial is not without danger. The complicated nature of this study is well shown by the



Photographic Studio, Municipal Technical School, Manchester, England.



Cotton Spinning Room, Municipal Technical School, Manchester, England.

fact that the English system was organized in frank imitation of that of Germany and yet no two systems could possibly be more unlike. Mere imitation either of England or of Germany or of the United States will never help us to build up a system of technical education suited to our own requirements and to the national genius of our people. If we once grasp that, we may learn much from this comparative study if we strive to find the causes which have produced the contrasts among the different systems.

Apprenticeship.

The question of the training of the workman is perhaps one of the greatest problems that has ever faced any country seeking to achieve a national and worldwide reputation for skill and industry, and in this connection the question of apprenticeship is all important. In this matter the method adopted in early times was well calculated to do the work successfully. Before the eighteenth century the agricultural worker was practically the only workman who was not a craftsman or mechanic, not so much because it was thought his work required little training or skill, but rather because he was not compelled to undergo a definite term of apprenticeship as evidence of proficiency.

The skilled artisan who was master of his trade worked at home in his own house assisted by a few younger workmen or journeymen. Into his house and family he received one or two young lads to learn during a seven years' apprenticeship the mystery of his craft. The ancient trade guilds grew and acquired their legal status upon this practice as their very foundation and a seven years' apprenticeship formed the one necessary qualification for the possession of the right to follow any art or craft recognized amongst the handicrafts of the time. With the extension of trade and the wider use of machinery the number and power of the adult workmen increased and with the increase of their power came a jealousy of both masters and apprentices. A conflict arose and during the progress of the conflict all that was good in the old system of apprenticeship was destroyed. Other issues aided in the accomplishment of the course thus entered upon. The master had begun to be less the craftsman and more the employer, the number of persons employed greatly increased and instead of the old loyalty between master and workman there came more and more jealousy until the workman sometimes never saw his real employer, and at last the apprentice became merely the boy worker with less wages but more obligations than a journeyman. The master to whom he was bound no longer taught him his trade. Appreticeship with its wholesome rules and mutual obligations having declined in everything but form, the lads who entered the shops were never properly instructed, but were made the drudges of the older workmen. With all its faults the old system did at least provide that a skilled master should become personally responsible for the training of the apprentice in his craft. In that well known codicil to his will Benjamin Franklin wrote: "I have considered that among citizens good apprentices are most likely to make good citizens."

The original conception of a trade or craft was that of a manual occupation requiring time and training in order to become proficient. This old conception has gradually changed with the development of modern industry following the rapid introduction of machinery and the minute subdivision of labour processes. It is now no longer necessary for an artisan to acquire a knowledge of all branches of the trade in which he is engaged and indeed in most shops it would be utterly impossible for him to do so. This subject of

the division of labour has been admirably dealt with by Beatrice and Sydney Webb in their book "Industrial Democracy" and a late bulletin of the Department of Labour, Washington, "Conditions of Entrance to Trades" describes its effects upon modern industry.

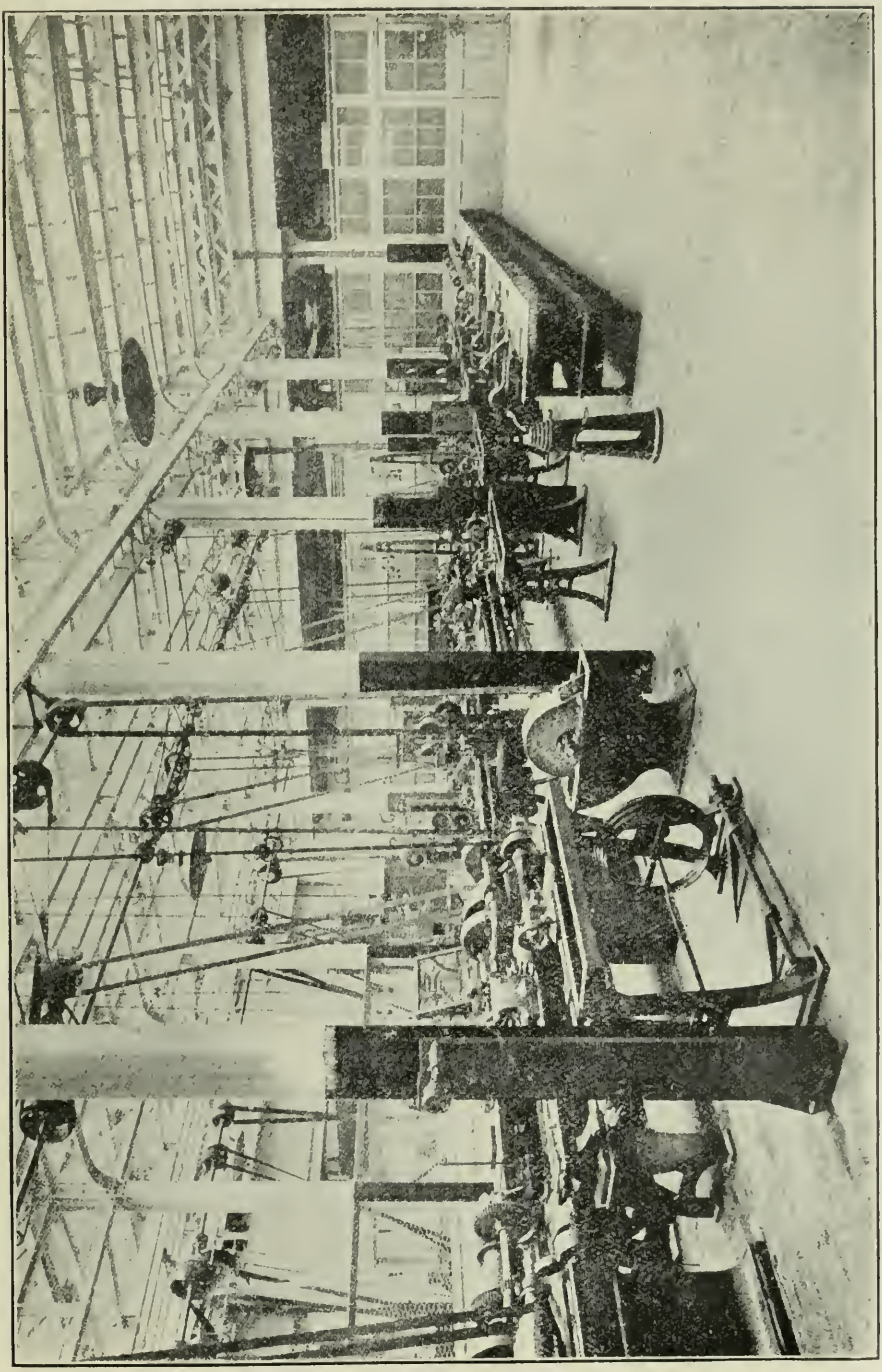
It is frequently asserted that the "old apprenticeship is dead" and the statement has almost become to be accepted as a fact without question. There is enough truth in the statement to lead the average individual to believe that apprenticeship is obsolete but the fact is the system is much alive and its principles are being accepted more and more. The "old" apprenticeship is dead, or rather the conditions under which it formerly existed. The apprentice no longer works side by side with his master, no longer lives in his master's family nor does the master have the responsibility of his moral and intellectual education as formerly, but the demand for efficient craftsmen is becoming so great that both employer and employee are coming to realise that some system of training in harmony with modern methods of production must be formulated.

Certain large establishments like the Baldwin Locomotive Works, Browne and Sharp Co., R. Hoe and Co., and many others have opened schools within their works for the purpose of training their apprentices.

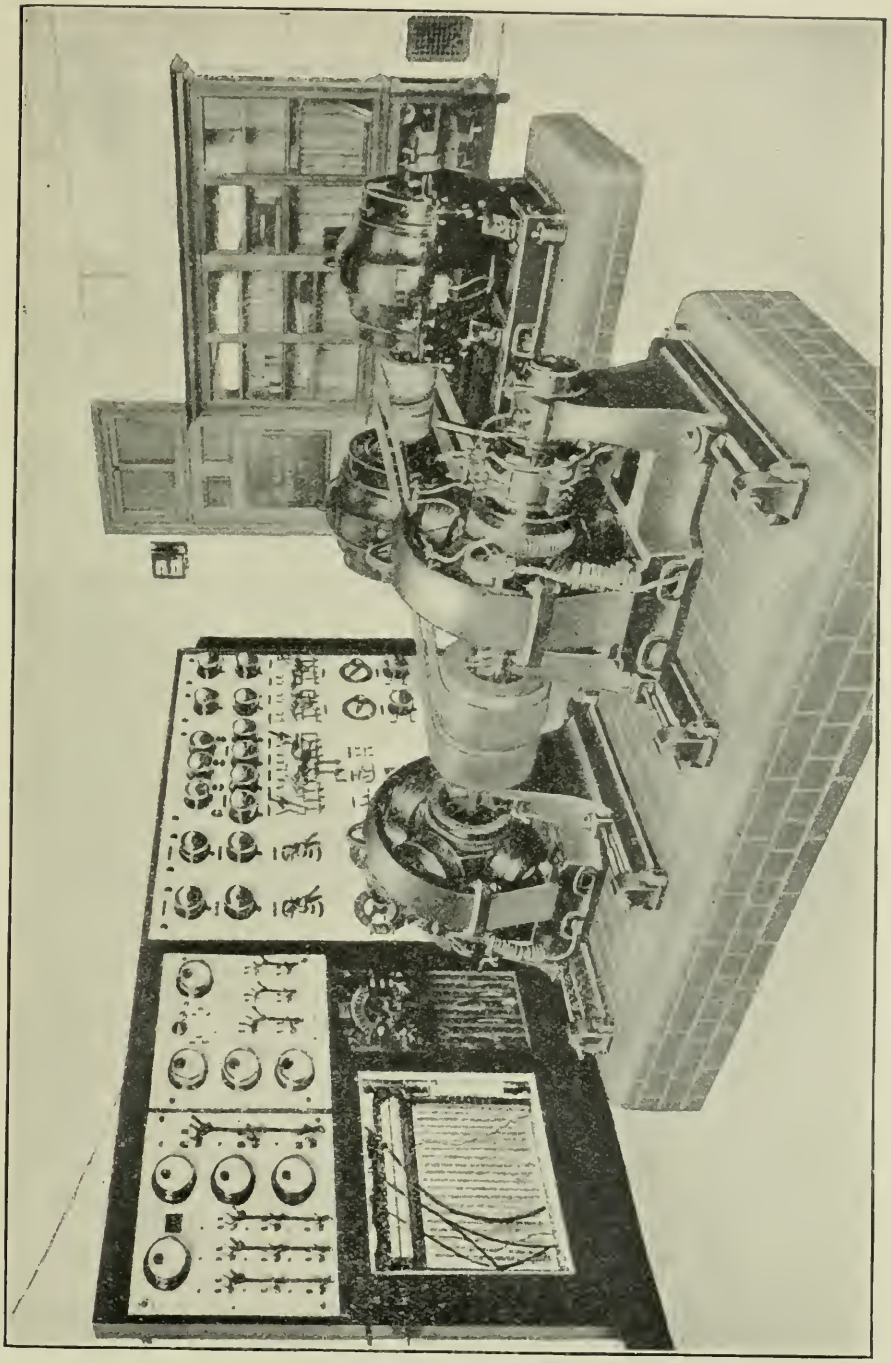
For nearly a hundred years R. Hoe & Co., of New York, have been famous in the development of the printing press. The company have long trained their own machinists from the beginning of their apprenticeship until they become journeymen. They conduct a well worked out apprenticeship system covering a period of five years. The factory school goes hand in hand with the factory itself. In the school the boys learn the theory, in the workshop the practical work, and every working day the two forms of instruction are combined.

The young men beginning at sixteen years of age, get their instruction in the shops from their foremen and from special instructors. The school is under the direction of a master and four assistants. The apprentices leave their work at five o'clock and after a light supper provided by the firm go to the school rooms which are modern and well equipped. For two hours they study those subjects which will help them to become expert machinists. They are taught elementary mathematics, elementary mechanics and English. Special attention is paid in the primary classes to reading, writing, and arithmetic. The boys then get a thorough course in mechanics, learn something of physics, study geometry and take a special course in drawing, taught by the expert draughtsmen of the firm. All the instruction is directly applied to the daily work in the shops. The school includes seven grades, each a school term. Thus the apprentice may be graduated in three and a half years. Upon graduation a formal diploma is given. When the apprenticeship is finished a certificate is given signed by the firm and this readily serves as a passport to any first class machine shop. The whole expense of the school is borne by R. Hoe and Co. Every year early in June, the closing exercises are held, addresses are made, diplomas are awarded, prizes are given to those who have made the best records and an entertainment is provided for the young men and their friends. In one of the school rooms is situated a shop library, well stocked with books on technical subjects as well as with works of history and fiction, and to these the young men have free access.

I am indebted for the above particulars to "The Apprenticeship Bulletin—Advocating Trade Schools and a Modern Apprenticeship System." This is a monthly publication issued by the School of Printing, Boston. This School is one of the latest and most hopeful attempts to solve the question



Engineering Workshop, Manchester Technical School, England.



Electrical Engineering Laboratory, Municipal Technical School, Manchester, England.

of trade or industrial training and as such merits a full description. It was begun as an evening class in January, 1900, under the supervision of a board of leading master printers of the city. Its pupils have been apprentices and others who were employed in printing offices, to whom the opportunity which the school presented seemed to be the most promising means of obtaining the instruction necessary to give them an intelligent start in learning the trade. It was acknowledged that the modern printing office, with its stress and strain and the practice of specialization did not, or could not provide that training which the apprentice should have in order for him to develop into a competent intelligent workman. It was believed that a school properly equipped with a well planned course of instruction and under the personal guidance of a competent instructor, would lay a better foundation for the future workman in a shorter time than could be accomplished in any other way. Though the evening school was fairly successful it was found that the amount of time which it could give was insufficient for the purpose intended. For this reason it was decided to open a day school which would follow shop practices and methods, the working time of the school to be the same as that of the shop, nine hours a day for a period of twelve months. With the view of improving existing conditions a number of master printers in Boston, and neighbourhood, proposed a new agreement between employer and apprentice which would bind both parties to perform certain specific acts. It was proposed to change the five years' apprenticeship to four in the belief that twelve months' training in the school will give a wage earning capacity much greater than the first year's service in the ordinary printing office and to allow the apprentice to enter his employer's service on the basis of the last half of the customary third year's salary. The school is run entirely in the interest of the pupils and not for the purposes of profit on the work done.

I have seen many specimens of the work of this school and the matter turned out is of the highest character, and I am indebted to the publications of the school for many of the above particulars.

The above institution is of course a private institution free from all state control and the movement towards trade schools is passing through the same stages as manual training and household science, the kindergarten and other forms of educational effort, that is, it depends upon private effort and initiative to show what to do and how to do it. When this has been done it is the work of the State to step in.

A good example of State schools of this kind is to be found in the apprentice schools of Berne, Switzerland. The workshops are Communal Institutions under the control and direction of the Communal Council. Funds are made up by the contributions of the Commune, the Canton, the Federation and the proceeds arising from the sale of the articles made in the school. The school has four main divisions,—mechanics, joiners, locksmiths and tinsmiths. The apprentice period is three years for all divisions. Candidates are admitted at fifteen years of age and must pass an examination showing the possession of a good primary education. A regular indenture is drawn up between the Communal Council and the apprentice or his guardian. The first four weeks is a probationary period and during this time each party has the right to dissolve the agreement, but after the expiration of that period each is bound to carry out the agreement under penalty.

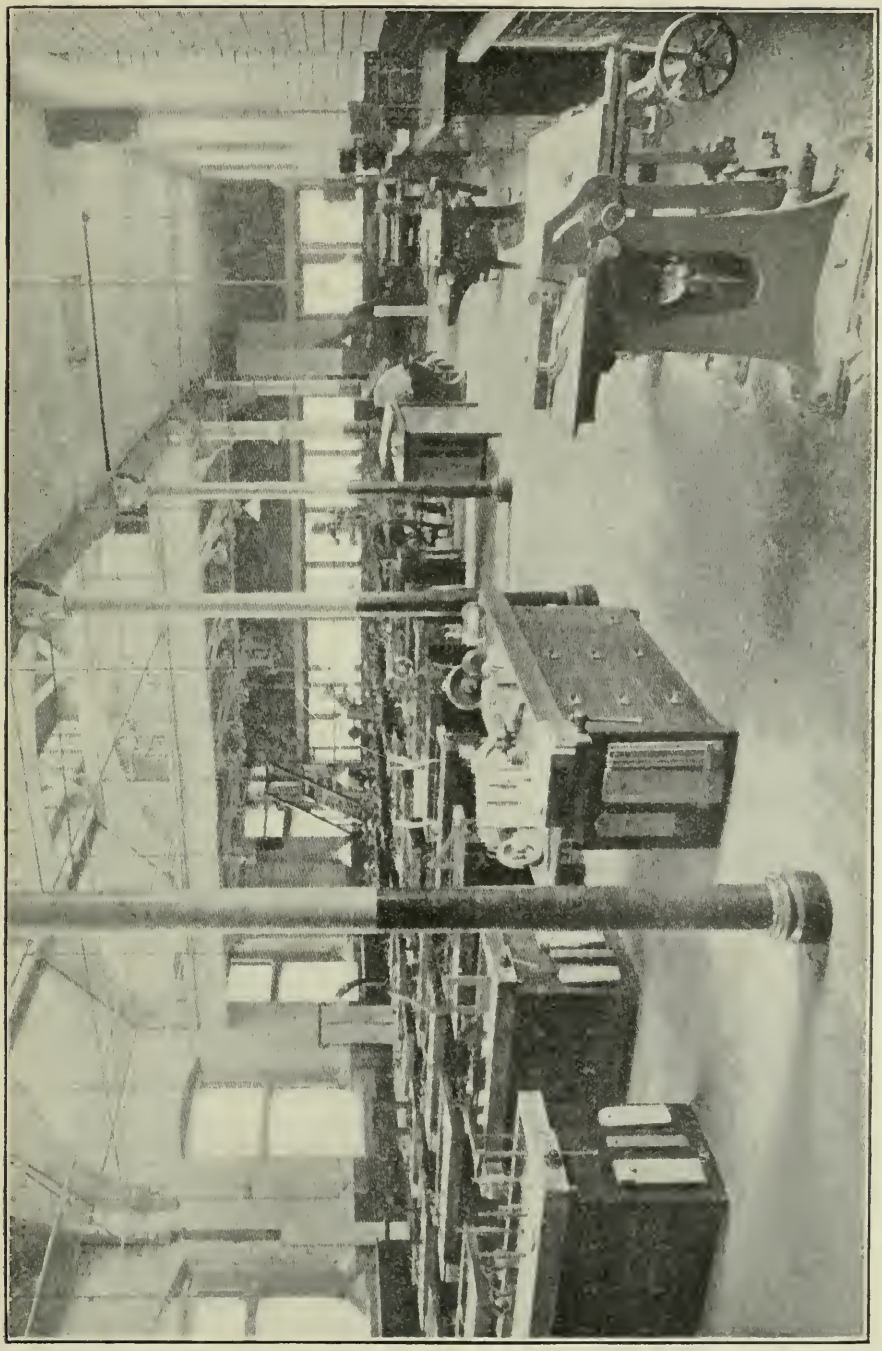
A full report of these and similar schools on the continent is to be found in the extensive report of the Commissioners of New South Wales. These Commissioners spent a period of about eighteen months investigating all forms of education in many parts of the world and their report is the most notable educational document published during many years.

The Aid of the Press.

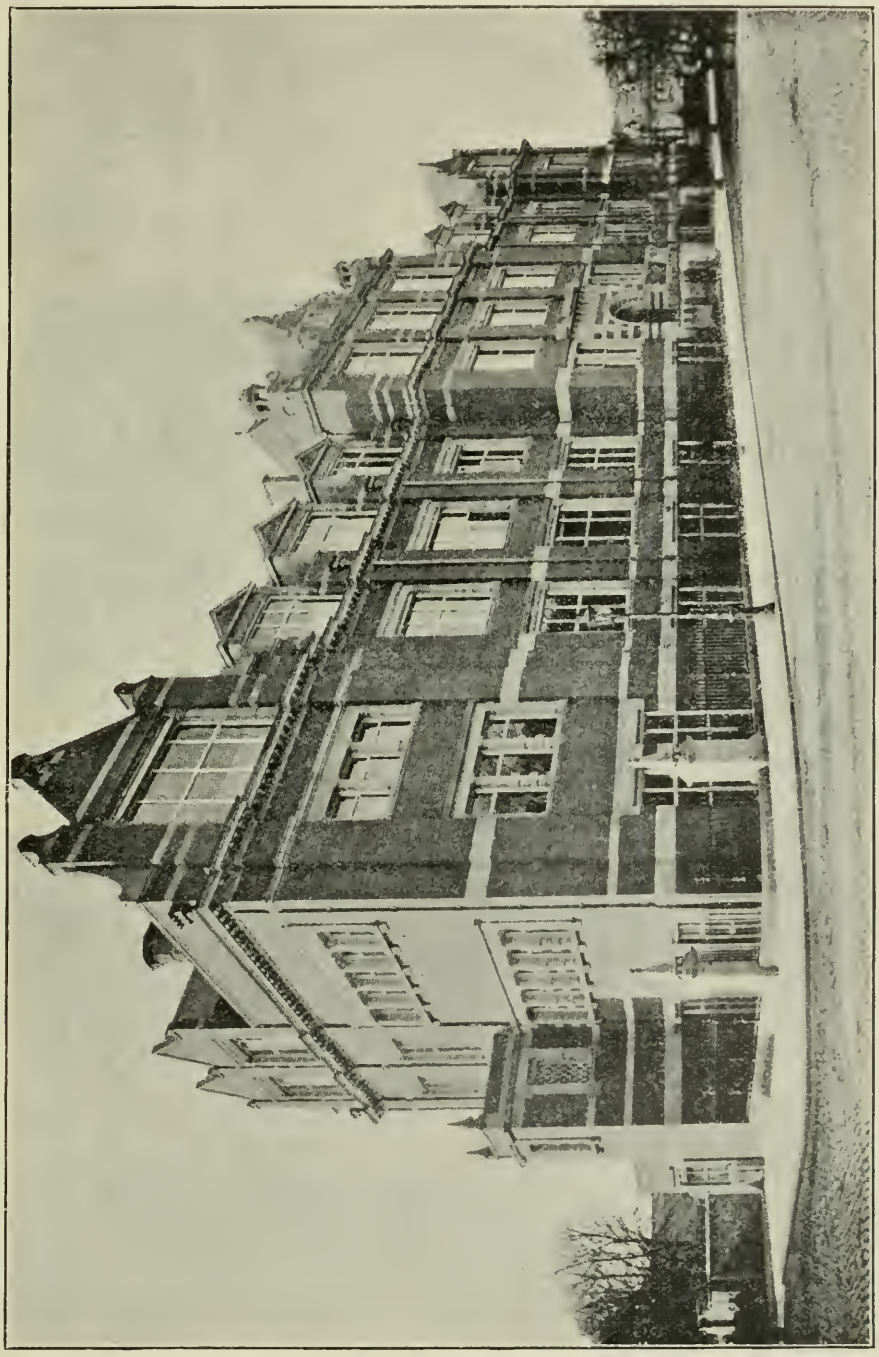
During the year considerable attention has been devoted to the subject of education in the public press. In the matter that has appeared, manual training and technical education has had a large share. A notable instance of the good that can be accomplished by the wise use of the press is shown by a series of letters that appared in the *St. Thomas Daily Times* early in the year. Manual Training had been introduced into the schools of that city and the advisability or introducing household science was being considered. A vigorous and forceful contributor to that paper, "Onlooker," had strenuously attacked both these subjects together with nature study and elementary constructive work which were already being taught in the schools. Dr. Silcox, the Public School Inspector of the city, replied to those strictures and a correspondence ensued lasting over several issues. The discussion was carried on with perfect fairness and good temper, though words were not minced on either side. At the conclusion of the articles "Onlooker" wrote as follows:—

"Almost Am I Persuaded.

"I read with deep interest the analytic reply made in last Monday's *Times* by Dr. Silcox, Inspector of Public Schools in St. Thomas, to my comments in this column upon what I and others have been designating the 'Fads and Frills of modern Education.' Dr. Silcox has put up an able and practical defence of what many of us term 'new-fangled' methods. As a rule, I cling as tenaciously to my own ideas as the average Britisher, but I have lived in Missouri, and am willing to be 'shown.' Dr. Silcox has shown us to a large extent that nature study, for instance, is of practical value, and that is the point I have been trying to arrive at all along. If nature study will result in restricting the ravages of the San Jose scale, the codling moth, the weevil, and kindred pests, then by all means go ahead and teach the rising generation how to recognize and cope with those things which are a serious menace to the general prosperity. So long as we were left to infer that nature study was mainly along æsthetic or sentimental lines, then I could not see any material benefit in it. I cannot quite see the consistency of Dr. Silcox's remark that the study of 'encyclopædias and works devoted to such matters,' is 'quite useless, except for a deceptive display of superficial knowledge,' when he follows it up with a recommendation to me to read 'Hodge's Nature Study and Life.' I haven't time to devote to 'a deceptive display of superficial knowledge.' I am willing to concede more—that perhaps the cardboard and paper snipping I have despised and ridiculed may be a necessary preparatory course for manual training, of the value of which I am quite convinced, not from theoretical exposition, as Dr. Silcox correctly surmised, but from actual demonstration. I have seen articles made by boys in the Collegiate Institute manual training department that I could no more begin to manufacture than I could hemstitch a handkerchief, and yet I can make a chicken-coop, not architecturally beautiful, but decidedly original in design, and which answers the purpose. I have concluded that manual training is all right, that nature study is of some practical value, and am not too bull-headed to be open to conviction as to domestic science being a desirable study for public school pupils. Modelling in clay and raffia weaving are still studies of doubtful value in my estimation, but Dr. Silcox may be able to show us how even they may be only a means to a practical and desirable end. The greatest danger to be guarded against is



Woodworking Department, Municipal Technical School, Manchester, England.



Technical School, Leicester, Eng.

overdoing it and neglecting other branches which, in my opinion, are more important."

The newspapers are glad at all times to publish anything that is sent to them on educational affairs as they all recognize that there is no subject of greater interest to their readers than that which so materially concerns their children. Our teachers should not hesitate to make use of this useful adjunct to their work, as in these newer subjects particularly the parents need information.

I give another informing article which lately appeared in one of the Toronto papers:

A Demonstration Luncheon, 25 Cents.

A meal prepared by a graduate of the housekeepers' course on cooking.

Did you ever happen to be bidden to a luncheon prepared by a graduate in the gentle art of cookery? If not, you have something yet to live for. It is a sort of double treat all through. You enjoy the good things set before you as anyone with a good digestion and a clear conscience is bound to do, and you have, moreover, the added zest of feeling at liberty to make the most barefaced and searching questions as to ingredients, methods, and prices. Why should this embryo housekeeper exhibit to you her newly-acquired skill and learning if you may not pick up some crumbs of wisdom at the feast?

Just such a luncheon was served last week, at the Technical High School by a graduate of the housekeepers' course, and the information gained shall here be shared with those not fortunately present.

First of all, be it known, the short four-months' course for housekeepers closed with the end of January, and as a summary of the term's accumulation of experience and knowledge, each graduate is hostess at a luncheon for which she plans, orders, cooks, and otherwise prepares with the help of four of her fellow-students as assistant cook, waitresses, and dish washer, respectively; she in turn to perform the same services for some other student.

Cost Twenty-Five Cents Per Head.

The cost of these meals per head must not exceed a given sum, which in the case of last week's was 25 cents; sometimes for the sake of practice in economy it is placed at 12, 15, or 20 cents. The following is the menu:

Bouillon

Rolls Oyster Timbales

French Chops Potatoes Croquettes Waldorf Salad

Porcupine Apples Whipped Cream

Cranberry Sherbet

Grapes Salted Almonds Candy

Black Coffee

The table was centered with deep pink carnations, a little rim of the same colour peeping out from under the embroidered centerpiece. Two dishes of grapes, and two of homemade candies were placed towards opposite corners. Covers were laid for twelve. The place cards bore on one side the name, and an apt quotation, and on the other a dainty water colour painting of fruit or flower along with the menu.

Some of The Dishes.

A few pointers here and there as to the concoction of some of the dishes will be "a word to the wise" and a help to the opposite kind. The bouillon may be made from either shank or neck. It must be simmered slowly,

cooled, strained, skimmed of fat, and finally cleared by the addition of an egg, shell and all, and brought to the boil.

The timbales shells were made on the regular irons for the purpose, with a batter of two eggs to one cup of flour. The oysters were cooked in the white sauce and cut into two if very large before putting into the shells. These were placed on paper mats on the plates.

The croquettes can be made with or without eggs in the mashed mixture, and after being formed into balls, are dipped in bread crumbs, then in egg, then in bread crumbs, and cooked in boiling fat. The only noticeable feature of the chops was that the meat was cut off part way up the bone, which was scraped clean. They were garnished with cress.

Apples and celery in equal parts with a few chopped nuts mixed with boiled dressing and served on lettuce leaves, was the Waldorf salad.

The porcupine apples were peeled, cooked in a syrup of two cups of sugar to one of water, then slightly browned in the oven, the centers filled with jelly when cold, and quarters of blanched almonds stuck all over for quills.

The cranberry sherbet matched the pinks on the centerpiece in colour, and came in for as much admiration for its appearance as its flavor. For this a quart of cranberries was cooked in a quart of water and strained. To the juice was added three cups of sugar and a little lemon juice, and when half frozen the beaten whites of two eggs were added and the freezing continued.

The Next Course.

The next housekeepers' course at the Technical School, for which there are a few vacancies still, begins with the first of this month and ends with the end of May, the course for nurses covering the same time. Upstairs in the sewing room of the domestic science department was arranged a display of fancy and plain sewing—daintily made shirt waists of silk or cotton, under-clothing, laundry bags, aprons, embroideries, etc. Some of these are the work of night students, and some of the day students. Basketry also has been learned with success, attested by quite an array of wicker work. Each student taking the two-year course is expected to make a complete set of underclothing, a shirt waist suit, tweed skirt, and show expertness in millinery.

The display of trimmed hats, the shapes for which were the work of the students as well as the trimming, displayed varying designs of native ability and considerable trained skill.

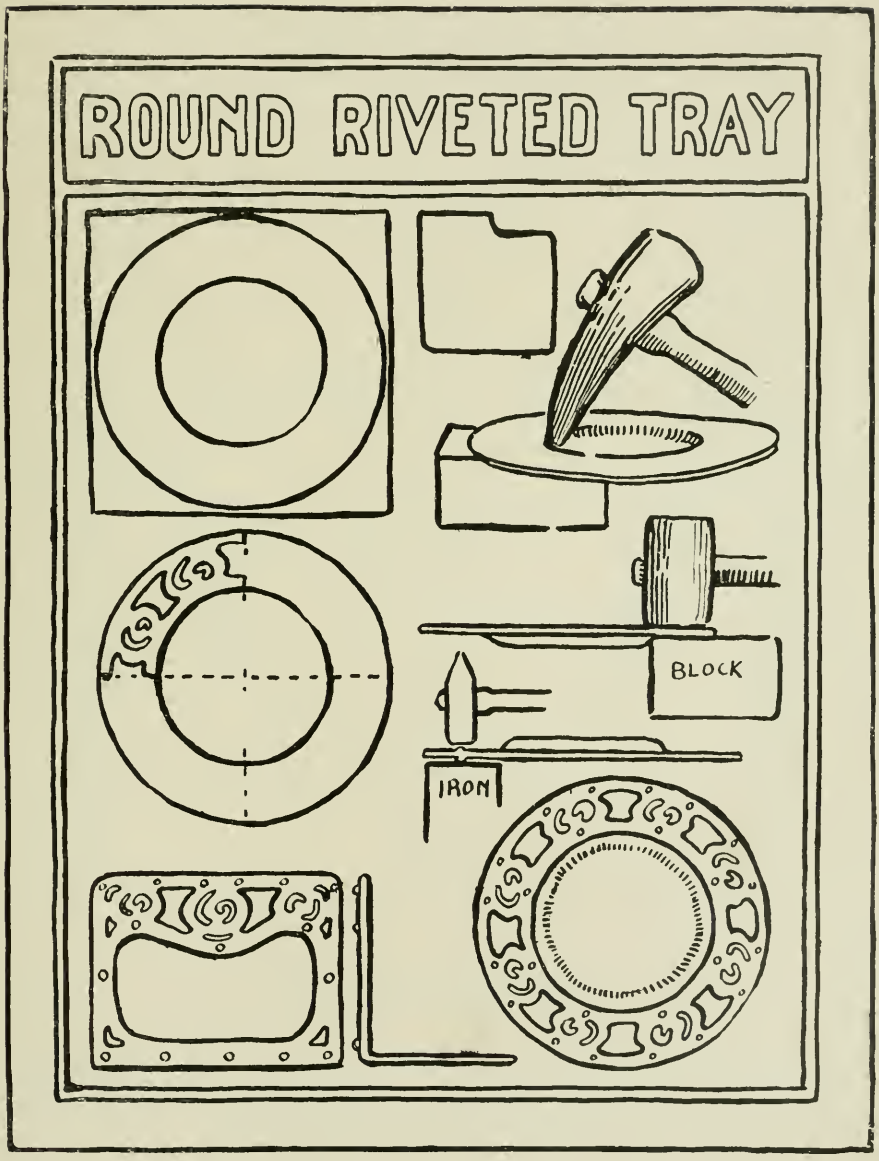
Conclusion.

During the year much attention has been given in the periodicals of this and other countries to craftsmanship, industrial and technical education, etc. Indeed it often happens that the newest and best thought and accounts of the most recent experiments are to be found within their pages. Space will not allow of a full list of them being given, but the teacher and educationist who wishes to keep himself informed on the articles relating to his subject appearing in all the current magazines should consult the pages of "What's in the Magazines" a little periodical published at five cents per month.

The teacher, manufacturer or labour leader who wishes to study the question of education applied to industry will find the following extremely useful:

Democracy and Social Ethics, by Jane Adams.

The Apprenticeship System, Massachusetts Bureau of Labour.



Specimen Sheet issued by ta "Correspondence School."

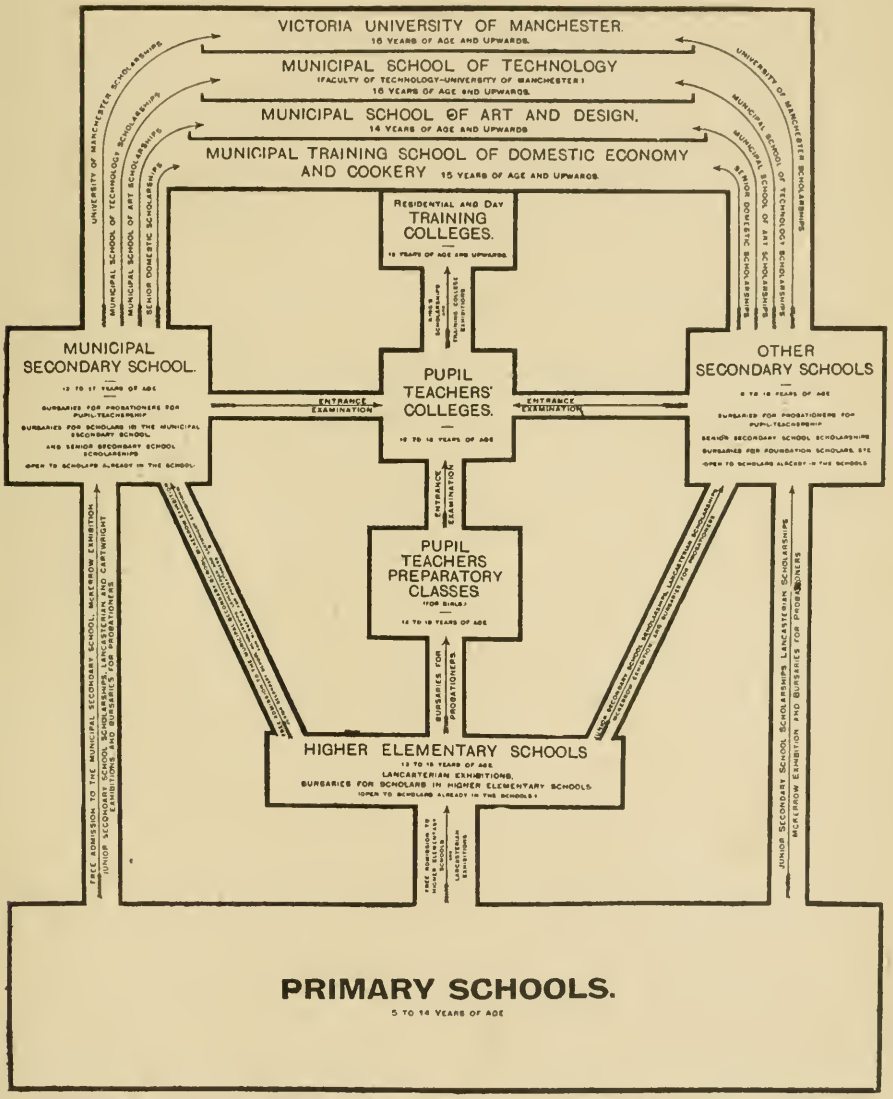

VICTORIA UNIVERSITY OF MANCHESTER.
16 YEARS OF AGE AND UPWARDS.
MUNICIPAL SCHOOL OF TECHNOLOGY
(FACULTY OF TECHNOLOGY—UNIVERSITY OF MANCHESTER.)
16 YEARS OF AGE AND UPWARDS.
MUNICIPAL SCHOOL OF ART AND DESIGN.
14 YEARS OF AGE AND UPWARDS.
MUNICIPAL TRAINING SCHOOL OF DOMESTIC ECONOMY AND COOKERY 15 YEARS OF AGE AND UPWARDS.
RESIDENTIAL AND DAY TRAINING COLLEGES.
18 YEARS OF AGE AND UPWARDS.
MUNICIPAL SECONDARY SCHOOL.
12 TO 17 YEARS OF AGE
BURSARIES FOR PROBATIONERS FOR PUPIL-TEACHERSHIP
BURSARIES FOR SCHOLARS IN THE MUNICIPAL SECONDARY SCHOOL AND SENIOR SECONDARY SCHOOL SCHOLARSHIPS
OPEN TO SCHOLARS ALREADY IN THE SCHOOL
PUPIL TEACHERS' COLLEGES.
16 TO 18 YEARS OF AGE
ENTRANCE EXAMINATION
OTHER SECONDARY SCHOOLS
12 TO 16 YEARS OF AGE
BURSARIES FOR PROBATIONERS FOR PUPIL-TEACHERSHIP
SENIOR SECONDARY SCHOOL SCHOLARSHIPS
BURSARIES FOR FOUNDATION SCHOLARS, ETC.
OPEN TO SCHOLARS ALREADY IN THE SCHOOLS
PUPIL TEACHERS PREPARATORY CLASSES
("FOR GIRLS.")
12 TO 16 YEARS OF AGE
BURSARIES FOR PROBATIONERS.
HIGHER ELEMENTARY SCHOOLS
12 TO 16 YEARS OF AGE.
LANCASTERIAN EXHIBITIONS.
BURSARIES FOR SCHOLARS IN HIGHER ELEMENTARY SCHOOLS.
OPEN TO SCHOLARS ALREADY IN THE SCHOOLS.
PRIMARY SCHOOLS.
5 TO 14 YEARS OF AGE

DIAGRAM ILLUSTRATING THE SYSTEM OF SCHOLARSHIPS AND BURSARIES
OFFERED BY THE MANCHESTER EDUCATION COMMITTEE, 1907.

Conditions of Entrance to Principal Trades, Bulletin No. 67, Washington.

Industrial Education in Germany, Special Consular Reports, Washington.

Report of Commission on Industrial and Technical Education, Boston.

Report of Mosely Educational Commission, London Co-operative Printing Society.

Industrial Efficiency, Shadwell, Longmans, 2 Vols.

Trade and Technical Education, 17th Annual Report, Commissioner of Labour, Washington.

Educational Foundations of Trade and Industry, Fabian Ware, Appleton.

Bulletins of National Society for Promotion of Industrial Education.

Report of New South Wales Commission on various forms of Education.

Continuation Schools in England and Elsewhere, Sadler, Manchester University.

I am glad to say that the last annual report, illustrated as it was by many photographs of work, schools, etc., was received with marked favour and has stimulated to some extent interest in these subjects. I have had many inquiries for it not only from our own Province and Dominion but from almost every part of the United States and from many foreign countries. Practical examples and illustrations are much more effective than mere theorising and, for this reason, I have been at considerable trouble to secure photographs from all over the Province and much suggestive material from England and foreign countries which appear in this report.

It is hoped the present report will still further arouse and sustain interest in this important subject, and that ere long some decisive action will be taken to extend the elementary work we are now doing in such a way as to tend to the more efficient training of the great mass of our people, who earn their living by the work of their hands.

In conclusion I wish to thank you, the Deputy Minister and the Superintendent of Education for the help I have received in the important work in which I am engaged.

I am,

Your obedient servant,

ALBERT H. LEAKE,
Inspector of Technical Education.

1st February, 1908.

APPENDIX R—REPORT ON THE SECOND INTERNATIONAL CONGRESS OF SCHOOL HYGIENE.

[A copy of the Volume of Transactions of the above Congress will, when printed, be placed in the Library of the Education Department.]

To the Honourable R. A. Pyne, M.D. LL.D., M.P.P.,
Minister of Education for Ontario:

Sir,—Having been appointed by you to attend the Second International Congress of School Hygiene, I beg leave to present the following report:—

The first International Congress of School Hygiene was held at Nuremberg in 1905, and it elicited so much interest that it was determined to hold another Congress in London in 1907.

His Majesty the King consented to act as patron, and Sir Lauder Brunton was elected President, Dr. James Kerr of the Department of Health of the County of London, and Mr. E. White Wallis, Secretary of the Royal Sanitary Institute, acting as Hon. General Secretaries.

Sir Lauder Brunton, in conjunction with the Secretaries, did an immense amount of work in various quarters of the world with the view of securing the success of the Congress, and the movement in Canada was inaugurated during a visit of Sir Lauder to Canada in 1906.

The meeting was held in the various buildings of the University of London from the 5th to the 10th of August, 1907. The number of persons present at the Congress has been estimated at about 2,000, and the actual number of delegates from 1,200 to 1,500. The opening meeting was held under the chairmanship of the Right Hon. Earl of Crewe, Lord President of the Council, on the afternoon of the 5th, the inaugural address being delivered by the President. In this address he referred to most of the subjects that could or would likely be treated, such as instruction in Hygiene to teachers and pupils, more perfect ventilation and insolation of schools, open-air schools, physical exercises, schools for cripples, the necessity for inspection of school children with a view not only to school work, but to their after life, making a few apposite remarks regarding these subjects.

Services in connection with the Congress had been held at the Cathedral on the previous day (Sunday). On the previous Saturday, as well as throughout the week of the meeting, receptions were held in various institutions, and by private individuals at which the members of the Congress became acquainted. On Tuesday, Wednesday, Thursday and Friday, general meetings of the Congress were held, commencing at noon. At other hours, both before and after these general meetings, meetings of sections took place, and visits were made, principally in the afternoons, to institutions in which it was supposed the members of the Congress would be interested; such as the Physical Training College at Dartford, the Children's Victorian Hospital, fire drills, demonstrations of Jiu-Jitzu, visits to various schools, industrial, technical and otherwise. These visits even extended to educational institutions outside of London, excursions at reduced rates for a limited number of members being arranged to Oxford, Cambridge, Eton, Stratford-on-Avon, and other places.

The Congress dinner was attended by both ladies and gentlemen and was a brilliant function. Both here and at the opening meeting nationalities from all over the world were represented, and representatives received a welcome for their various nationalities and responded thereto.

Returning now to the more immediate business of the Congress, the sections into which it was divided may be here enumerated:—

I. "The Physiology and Psychology of Educational Methods and Work." President: Sir James Crichton-Browne, Kt., J.P., M.D., LL.D., F.R.S. Hon. Secretaries: F. E. Batten, M.D., F.R.C.P.; Robert Jones, M.D., F.R.C.P., F.R.C.S.

II. "Medical and Hygienic Inspection in School." President: Prof. Wm. Osler, LL.D., F.R.C.P., M.D., D.Sc., F.R.S. Hon. Secretaries: Ralph H. Crowley, M.D., M.R.C.P.; A. H. Hogarth, B.A., M.B., D.P.H.

III. "The Hygiene of the Teaching Profession." President: T. J. Macnamara, LL.D., M.P. Hon. Secretaries: Alice V. Johnson, F.R.C.S.I., D.P.H.Camb.; Marshall Jackman.

IV. "Instruction in Hygiene for Teachers and Scholars." President: Sir William J. Collins, M.P., D.L., J.P., M.D., M.S. Hon. Secretaries: H. Meredith Richards, M.D., B.Sc.; Miss A. Ravenhill, F.R.San.I.

V. "Physical Education and Training in Personal Hygiene." President: Sir John W. Byers, M.A., M.D., M.Ch., M.A.O. Hon. Secretaries: James Cantlie, M.A., M.B., F.R.C.S.; John G. Kerr, M.A., LL.D.

VI. "Out of School Hygiene, Holiday Camps and Schools. The Relation of Home and the School." President: The Rt. Hon. Lord Kinnaird, F.R.G.S., D.L., J.P. Hon. Secretaries: Mrs. Kimmins; E. M. Naill, M.D.

VII. "Contagious Dieases, Ill-health, and other Conditions affecting Attendance." President: Sir Shirley F. Murphy, M.R.C.S. Hon. Secretaries: C. J. Thomas, M.D., B.Sc., D.P.H.; W. H. Hamer, M.D., F.R.C.P.

VIII. "Special Schools for Feeble-Minded and Exceptional Children." President: W. H. Dickinson, M.P., J.P., D.L., B.A. Hon. Secretaries: R. Langdon Down, M.B.; G. E. Shuttleworth, B.A., M.D.

IX. "Special Schools for Blind, Deaf and Dumb Children." President: The Rt. Hon. the Earl of Crewe, P.C. Hon. Secretaries: B. P. Jones; William Van Praagh (deceased).

X. "Hygiene of Residential Schools." President, Clement Dukes, J.P., M.D., B.S., F.R.C.P. Hon. Secretaries: A. Lambert, M.D.; W. Attlee, M.A., M.D.

XI. "The School Building and its Equipment." President: Thomas Edward Colcutt, Pres. R.I.B.A. Hon. Secretaries: J. Osborne Smith, F.R.I.B.A.; J. R. Kaye, M.B., D.P.H.

It would be too great a tax upon your time to give even an abbreviated report of all the papers and discussions. I would, therefore, simply indicate some salient points in connection with the various sections.

Amongst the papers read in Section 1 is that of Dr. W. Leslie Mackenzie, M.A., M.D., of the Local Government Board, of Scotland. The Royal Commission on Physical Training (Scotland) commissioned Dr. Mackenzie to obtain information by actual examination of 1,200 children. It is stated in the paper that since then there has been a steady development of the work in Scotland. In Glasgow, 80,000 children have been weighed and measured. The Swedish system of physical exercise is now superseding all others. In Edinburgh, Glasgow, Dundee and Leith, careful surveys have been made of school children. Dr. Chalmers in a note at the end of the paper summarises the factors which cause inefficiency of the population.

Investigation into the hours of sleep amongst English school children was the very important and interesting subject of a paper by Miss Alice Ravenhill, F.R.San.I., London. The author sent out 10,000 forms of questions to which she received 8,650 answers.

There is a wide-spread ignorance as to the sleep requirements of children. Analysis of the returns tabulated show:—

(1) The percentage of sleep grows less (from 50 per cent. to 30 per cent.) in both sexes from 4 to 17 years of age.

(2) Girls have more sleep than boys, but neither have sufficient.

(3) The variation is greater among girls; both sexes have more in winter.

Sleep is affected by housing conditions and by home employment.

The range of occupations for children is almost incredible.

Finally, deficiency of sleep is a potent factor in malnutrition.

The other subjects taken up in section 1 were Anthropometric Measurements which in some schools, as for example in Prague, were very systematically carried out; the minimum school age, about which there was the usual variety of opinions which we find amongst ourselves; and some papers on ambidexterity, and right and left handedness, respectively; adenoids, optical defects, and suicide amongst scholars.

In Section II, "*Medical and Hygienic Inspection in Schools*" was very fully represented in a number of papers and discussions. Work being done in Argentina, England, France, Austria, Germany, Bohemia, Switzerland, Canada, Belgium, Sweden and Italy was described. In many places the school and grounds, as well as the children, were subjects of periodical inspection, and with the latter in some cases anthropometrical observations as well as pathological were included.

A factor in the discussions which has been incorporated with, or added to, the medical inspection is that of the school nurse. Amongst her duties are the seeing to the carrying out of the instructions of the medical inspector either personally or by visits to the homes of the children. She also assists the Inspector, thereby curtailing the amount of time which it is necessary for him to devote; this assistance being given both at the time of his visits and also in some cases by preliminary arranging and sorting out of the children. The work done by the school nurse is extremely valuable, not only in its immediate effects, but also in the education that it gives to the householders. The children themselves also carry a good deal of this missionary work to their respective houses. In places where school inspection has been carried out it is treated or spoken of as one of the things taken for granted and not to be dispensed with, its tried usefulness having given it this aspect.

The only little breeze in connection with it was a paper read by a school master and an ex-President of the National Union of Teachers, who thought that the Inspector had not been sufficiently aggressive in "doing things and ordering things to be done."

In connection with some of the schools there are what are called "mothers' days" on which mothers come to the schools after the ordinary school hours and receive instruction on questions of feeding and other matters of personal and domestic hygiene.

In this section a paper was read by Dr. Helen MacMurchy, of Toronto, presenting in a forceful manner the arguments in favor of "Inspection of School Children" and the benefits to be derived from it.

Section III, "*The Hygiene of the Teaching Profession.*" The care of the voice, the teachers' benevolent fund, school overwork of the teacher, the existence of nervous diseases and tuberculosis were among the subjects of the papers read. Reference was made to the Teachers' Superannuation Act of 1898. There were also papers read which seemed to have relation to some of the other sections; and conjoint meetings between sections sometimes took place.

In Section IV., "*Instruction in Hygiene for Teachers and Scholars,*" the opening address was made by Sir Wm. J. Collins, M.P.

Several papers were read emphasizing the importance of the teaching of Hygiene to teachers. One of these was by Ethel Adair Roberts, Principal of the Carnegie College of Hygiene in Dunfermline. This had for its object the training of teachers of gymnastics and physical exercises based on hygiene. The course extends over 2 years and embraces 30 lectures on personal hygiene, 100 lectures on hygiene of school life, 30 lectures on symptomatology, 200 lectures on physiology.

Professor Richard Caton, M.D., F.R.C.P., J.P., consulting physician, Liverpool Royal Infirmary, also contributed a paper on the teaching of Hygiene in primary schools, in which he emphasized the importance of the teachers themselves being properly trained so as to properly instruct the pupils.

Dr. Kenwood, of University College, a well-known author on Hygiene, read a paper in the same direction. As did also Dr. Knudsen, Dr. Helen Putnam of Providence, R.I., Dr. Ritchie of Manchester, Dr. Thomas D. Woods, Professor of physical education in Columbia University, U.S.A., Dr. Thomas, assistant medical officer of the Education Department, London County Council and Dr. Pearce Gould.

Dr. Shelly, medical officer of Haileybury College, thus speaks of the anomaly of its omission in some of the secondary schools: "The position is "therefore illogical, instruction in personal hygiene is admitted to be desir- "able for the labourer's child, but the teachers themselves are not trained to "give it; further, if desirable to one class, it is desirable in all."

Sir Victor Horsley, an eminent London surgeon, who became so well known, even to the general public of Toronto, in connection with his visit here in the previous summer, introduced the following resolution which was carried unanimously:—

"That this Section is of opinion that the principles and practice of per- "sonal Hygiene and of domestic science should form part of the education "of every citizen and should be taught in all schools and universities."

In Section V, "*Physical Education and Training in Personal Hygiene*," the opening address was delivered by Sir John W. Byers, M.D., and papers were read by Dr. R. Tait Mackenzie, University of Pennsylvania, on "Systematic Physical Exercise for College Students," one on "Jiu-Jitzu," by Mrs. Roger Watts of London, one on "Folk Dancing as an Agency in Physical Training," by Dr. Gulick of New York, and on various kindred subjects by many others.

Section VI, "*Out of School Hygiene. Holiday Camps and Schools Relation of Home and the School.*"

The opening address was delivered by the Right Hon. Lord Kinnaird. He referred to the various institutions and instrumentalities by which errand boys and apprentices, as well as boys attending the various schools, obtained their annual outings, and bore testimony to the beneficial effects both on the physique and character of the boys.

Among the contributors to the programme were the Countess of Jersey on "The work of the Children's Happy Evening Association," Mrs. Humphry Ward on "Play Centres and Vacation Schools for Elementary School Children," Mrs. Kimmins on "The Guild of Play and Residential Vacation Schools," Miss Sewell on "New Possibilities of Recreation Grounds," Captain Polvliet of Amsterdam on "School Camps," Mr. Whithouse, London, on "The Organization of the Out-door Life of London School Children," Professor Griesbach, of Muelhausen, on "Time, Effect, Value and Measure of the Tasks done at Home for the School," besides many others.

Section VII, "*Contagious Diseases, Ill-health and other Conditions affecting Attendance.*"

The opening address was given by Sir Shirley Murphy, Medical Officer of Health, County of London, President of the Section.

Under this Section the subject of tuberculosis received a good deal of attention. A paper was read by Dr. C. C. Jessen, of Copenhagen. Among other things he stated that although there is a medical examination of teachers before beginning work, 19 per cent. of male teachers died of tuberculosis in comparison with 9 per cent. of all males. This accords with the observations stated in a paper prepared by me, a copy of which is herewith submitted, and in which are given statistics and other facts from various countries, including England, the United States, and the Province of Ontario, showing that the death rate from tuberculosis amongst school teachers, and especially amongst female teachers, is much greater than that of other persons of the same social rank in other occupations. I regret that in the Associated Press despatch undue prominence was given to Ontario in connection with the death rate from tuberculosis of teachers. On reference to the paper, a copy of which is appended to this report, it will be seen that some other countries appear in a worse light in this connection than Ontario. The paper shows that there are factors in connection with the school-room life which are an unnecessary menace to the teacher in respect to tuberculosis and which ought to be remedied. This remark applies to the schools of some other countries at least as much as to those of Ontario. But the conditions complained of do exist generally, and in Ontario as well as other places.

A paper by Dr. Gourichon, President of the Society of Medical Inspectors of Schools, Paris, would seem to indicate an exception in the case of the primary schools of Paris and the Department of the Seine. At least he says that the disease is rare and that when it arises it takes its rise outside of the school. In what way this can be ascertained is not distinctly comprehended. He says, moreover:—"L'inspection médicale des écoles régulièrement effectuée est necessaire pour assurer la salubrité des locaux et défendre maîtres et élèves contre les maladies contagieuses et notamment la tuberculose."

In the paper by Dr. Jessen already alluded to, he states that teachers retiring on acount of tuberculosis receive two-thirds of their salary on so retiring.

Some of the other papers in this Section discussed the necessity for, and defects of the system of, closing of school buildings in dealing with outbreaks of contagious diseases.

Another Session was devoted to the consideration of trachoma and certain skin diseases.

It was recommended by the Section that a committee be appointed to consider and report upon the amount of air space, and of air per hour, necessary in school rooms for the maintenance of health. A resolution was carried at the closing general meeting of the Congress to the effect that such committee be appointed by the President.

Sections VIII and IX it will be seen dealt with special and exceptional classes of children, *the feeble-minded, blind, deaf and dumb.*

In Section VIII, Dr. W. H. Dickinson gave a comparative history of 100 children in special schools and 100 in the elementary schools in the same districts.

Owing to the special character of these schools and children, it would be impossible to give a synopsis which would fairly represent the work done in them, and I would, therefore, refer you to the "Volume of Transactions" which, when published, will be placed in the Library of the Department.

The same remark will apply to a discussion which took place of the means to be adopted to prevent the reproduction of the mentally defective.

In Section X, *"Hygiene and Residential Schools,"* in addition to the ordinary subjects embraced in school hygiene, dietaries, dormitories and other matters of domestic interest which pertain more particularly to residential schools were taken up.

A subject which of late has come to the front and has to be handled with great care and delicacy was discussed in a series of papers at the last session of this Section. The nature of the subject and the mode of dealing with it may be set forth in certain statements thus:—That sexual hygiene is of very great importance, both for physical reasons, and for its mental and moral relations. That knowledge with regard to the origin of life and reproduction ought not to be left to be acquired haphazard, and possibly first through impure channels, but that young people should be instructed and guided, in a degree proportionate to their age, development and capacity for receiving such knowledge and the necessity for such guidance. In certain cases and certain classes of the community it is advisable that parents and medical advisers should take the chief part in the matter of instruction and guidance, respectively, and should at least be consulted, the function of the teacher as mentor, co-operator, or taking charge of the instruction and guidance, varying under varying circumstances and conditions. Opinion varied as to how far and at what age collective instruction might be given as distinguished from individual.

Section XI, *"School Building and its Equipment."*

The President, Mr. T. E. Collcutt, President of the R.I.B.A., read a paper on "Standard Regulations with Regard to Swedish School Buildings."

Mr. David Barclay, of Glasgow, read a paper, recommending the Govan Schools as models of the "Plenum System," evidently finding it a great advantage, as we have in some of the forms in which it has been introduced in our schools.

Mr. W. N. Haden, M.I.Mech.E., Trowridge, contributed a paper dealing with the part to be played in heating and ventilation of the school by the medical hygienist and the mechanical engineer respectively, and calls upon the medical sanitarian to do his duty and give a clear pronouncement, thus calling for what is evidently an existing necessity, more accurate observation and pronouncement by medical men as to the amount of fresh air necessary for the requirements of health in schools.

Several papers were read as to the correct methods of writing and posture assumed. Proper lighting, heating and ventilation of school rooms were fully discussed.

A less common subject of discussion was presented by Mr. A. J. Pressland, B.A., of the Edinburgh Academy, "Noises in the School-room," those from faulty desks and other furniture, and proximity to streets being dealt with.

The proper methods of cleansing and disinfecting school rooms was also taken up.

A resolution by Jonathan Hutchinson, a London surgeon, in connection with this Section was as follows:—"That it is of great importance that "liberal provision should be made in all school buildings for the formation "of an educational museum in which should be displayed maps, models, "portraits, pictures, natural history specimens, and scientific apparatus for "objective teaching."

Sanitary Exhibition.

An exhibition was established in connection with the Congress, the exhibits being classified as follows:—

Drawings and Designs.
Building Materials and Construction.
Floor and Wall Surfaces.
Fireproof and soundproof flooring.
Dust removal and prevention.
Water Supply.
Drainage, Sanitary Appliances and Fittings.
Warming, Lighting, and Ventilation.
Decoration.
Dietaries.
Clothing.
Furnishing and Equipment.
Teaching and Technical Appliances.
Physical Culture.
Playgrounds.

Among the exhibits was a stall showing samples, literature, and models illustrating Harbutt's "Plasticine," a modelling paste made in different colours, always soft and ready for use, and recommended by some sanitary authorities as being much superior to clay or wax. A sample and some literature in connection with it is presented along with this report.

The exhibits embraced much that was of interest not only to school hygiene but to hygiene generally. Amongst these may be mentioned various kinds of asbestos flooring; a system of sink and basin wastes of the Ajax Sanitary Company, in which a weir for holding in water was substituted for the ordinary plug. This weir is a flat sheet of hard rubber which can be removed and readily cleansed. Its removal will allow the waste water to discharge. The apparatus is the invention of Dr. James, a medical hygienist. A very large exhibit of appliances to which it had been fitted was contained in a number of contiguous stalls.

In the grounds was an exhibit of portable buildings, some of them being models of the so-called "forest schools" in Berlin and Charlottenberg, and a number of exhibits of gymnasium apparatus in connection with physical hygiene.

One more exhibit of a pathetic character, which may serve as a hint to some of our institutions, might be mentioned—stall No. 10, "The Guild of the Poor Brave Things," contained models of a doll's house and seaside cottage made by the crippled children of the Dame Armstrong House, Harrow-on-the-Hill.

It is hoped that many duplicates of exhibits from this exhibition will be forwarded to the Museum of Hygiene of the University of Toronto.

To give a report which would do justice or describe more fully the Congress and its accessories would encroach upon your time, and we trust that this summary may be of some interest to you.

All which is respectfully submitted,

Wm. Oldright.

ADDENDUM.

Second International Congress on School Hygiene.

THE SCHOOLROOM AS A FACTOR IN TUBERCULOSIS.

By Wm. Oldright, M.A., M.D., Professor of Hygiene, University of Toronto; Delegate from the Canadian Medical Association, and Chairman of the Local Committee for Toronto, Canada, of the Second International Congress of School Hygiene.

In most civilized countries the State assumes it to be its duty to give the child "a fair start in life." In its labour laws it endeavors to protect him from injurious influences; in its truancy Acts it tries to see that he is provided with a suitable mental equipment to start with, and by its department of education and otherwise it enacts regulations with the intention of maintaining a proper physical environment. If it compels the child to attend school, as it rightly does, it is all the more its duty to see that it does not thereby compel him to be in a place injurious to his health; and it appears to the writer that this Congress may be fairly looked to for a pronouncement as to whether the State is doing what it can, should, and would do in this respect, and which pronouncement may help it in so doing. What has been said of the duty of the State and of our duty towards the child will apply still more strongly to our duty towards those who volunteer to act as the educators of the child, the teachers, inasmuch as they spend the whole of their professional life in the school condition in which the child spends a few years. This last fact of their spending their lives thus is of value in enabling us to judge of the sanitary effects on the child as well as on the teacher himself or herself, for it is the female teacher who appears to be most affected. We know how difficult it is to measure differentially the effect of the various factors of an unsanitary condition—*e.g.*, the effect of impure air on the inhabitants of slum tenements, for we have here the effects of bad food, uncleanliness, alcoholism, and other injurious influences combined with impure air; but the teacher has the opportunity for enjoying the advantages of good food and habits and surroundings in his out-of-school life that others of his class do. If, then, the teacher's record on the death or sickness roll is markedly and generally different from that of other persons in his or her social class, but in other occupations, it is fair to look to the school life for the cause.

This paper, then, will take up the consideration of the following questions:—

1. Do statistics show any marked difference between the prevalence of any disease amongst teachers and persons in other occupations? and the disease to which our attention will be specially directed is pulmonary tuberculosis or consumption.

2. If so, what are the causes of this difference?

3. How may they be remedied, and has there been any improvement?

4. How can this Congress aid in bringing about the remedy or remedies?

1. During the early investigations of the Provincial Board of Health of Ontario the writer was struck with the lamentably prominent position held by the teachers of the Province in the death-list from consumption. That the average age at death of teachers was small was not to be wondered at, for many teachers leave the profession before reaching an advanced period of life, thus making the average age of the profession a young or

small one; but this should not make so great the proportion of deaths from consumption to the total deaths from all causes, as compared with the decedents in other occupations.

The comparison will be seen in Table 1., which I have compiled from the returns of the Registrar-General of Ontario. So as not to take up too much of your time I give only the ratios, and give references to

TABLE 1.

Ratio of deaths from consumption in 100 deaths from all causes compiled from tables of deaths by occupations and causes of death in the Returns of the Registrar-General of Ontario for 1880, 1881, and 1883. The figures in parenthesis indicate rank in prevalence of consumption.

Occupations.	1880.	1881.	1883.
Stonecutters	—	(1) 44.4	(1) 65.0
Seamstresses	—	(2) 43.7	(5) 40.6
Milliners and Dressmakers	—	(3) 34.3	(11) 25.0
Teachers, female only	—	—	(3) 57.0
Teachers, male and female	(2) 29.1	(4) 32.3	(6) 29.9
Teachers, male only	—	—	(7) 28.5
Chemists and Druggists	—	(5) 31.2	(7) 28.5
Servants	(1) 33.3	(6) 26.6	(7) 28.5
Bankers	—	(7) 23.0	(15) 15.3
Printers	—	(8) 20.0	(2) 60.8
Barbers	—	(9) 18.1	(10) 27.2
Railway Employees	—	(10) 17.2	(12) 20.6
Shoemakers	(3) 20.4	(10) 17.2	(13) 20.5
Sailors	—	(10) 17.2	(17) 14.2
Blacksmiths	—	(12) 15.8	(16) 14.9
Butchers	—	(14) 15.0	(19) 7.4
Public Officials	—	(15) 11.6	(18) 11.5
Farmers	(4) 12.7	(16) 12.2	(14) 16.0
Lawyers	—	(17) 9.0	(11) 25.0
Physicians	—	(18) 7.7	(13) 18.5
Clergymen	—	(18) 7.7	(7) 28.5

(*a*) Sessional papers of the Legislature of Ontario, 1882-1883, Vol. XV., Part V., p. 57.

(*b*) Sessional papers of the Legislature of Ontario, 1882-1883, Vol. XV., Part V., pp. clxxiv-clxxv.

(*c*) Report of the Registrar-General of Ontario for 1883, pp. clxxxiv-cxcix.

the pages of the published report for those who wish to refer to them. Ratios for some of the occupations are given, amongst them of some which are generally supposed to be productive of consumption, such as stone-cutters and printers; some whose outdoor habits are as generally supposed to have the opposite effect, and some between the two extremes. I have arranged the occupations in the descending scale of the prevalence of deaths from consumption in 1881, and have indicated by figures in parenthesis (for convenience of comparison) the ranking for 1883, and for such few occupations as are given in a small table for 1880.

For some reason which I do not know the compilation of the causes of deaths by occupations was discontinued, but has been resumed, and I had hoped to receive the first of the new series in time for comparison in this paper.

Some may notice certain peculiarities, as, for example, the discrepancies in deaths of printers in two different years, which are not relevant to this paper.

The writer being anxious to ascertain whether the teachers in other countries were exposed to the same dangers, wrote to the Census Bureau of the United States, and, through the courtesy of Dr. Billings, and later of Dr. Cressy L. Wilbur, is enabled to present statistics published in 1892 and 1902 respectively. In the volume of 1892 (for the year 1890) he found

Table 2.

Number of Deaths from Phthisis in certain Occupations out of 1,000 Deaths from all Causes in the following Cities:—

Occupation.	Baltimore.	District of Columbia.	New York.	Brooklyn.	Philadelphia.	Boston.	(a) Average of the ratio of the six cities (decimals omitted.)	Rank in order of mortality from Consumption.
Clergymen	138.89	120.00	153.85	91.95	140.50	83.33	121	10
Lawyers	119.40	125.00	102.49	236.11	139.13	96.39	136	8
Physicians and Surgeons	204.82	103.90	120.85	113.48	135.87	90.00	128	9
Saloon - Keepers, Bartenders, etc.	213.11	305.88	296.32	295.65	223.81	276.47	268	5
Barbers and Hairdressers	490.20	371.43	338.13	358.62	317.83	436.36	385	4
Printers and Pressmen	429.82	342.28	437.82	370.69	377.91	430.56	398	1
Policemen, Watchmen and Detectives	183.67	187.50	190.80	169.23	161.90	113.64	167	6
Stonecutters	432.43	333.33	398.51	423.53	261.90	496.89	391	3
Farmers, Planters and Overseers	141.18	175.26	207.27	128.49	103.73	83.92	139	7
Female Teachers in schools	452.38	395.35	272.06	336.96	441.86	477.27	396	2
Dressmakers and Seamstresses	396.00	386.86	385.63	350.75	405.41	388.65	385	4

This table was compiled from Census Reports of deaths in the several cities referred to for the six-year period ending 31st May, 1890, as published by the Census Bureau of the United States of America.

(a) This column was compiled by the writer by adding together the figures of the six cities and dividing by six. A more correct average regarding the teachers collectively of the six cities combined would be obtained by adding the deaths from all cities together, and taking the average; but by this method we are able to get the rank in prominence of the six city units.

ready to his hand tables of ratios for six of the principal cities of the United States. These he has brought together in one table, (Table 2), and has added two columns, in the first of which he has added the ratios of the several cities, and divided by six, so as to give in the last column an average of the position on the list of consumptives of the cities taken in units.

From the more recent returns for the year 1900 for the whole of the United States (published in 1902) I have given the ratio of deaths from con-

sumption of school teachers as compared with the same figures for all occupations, (see Table 3). These ratios I have compiled by adding together the total deaths from all sources in each table, first deaths from all causes, and then those from consumption, and taking their respective ratios. The tables will be found in vol. 3, part 1, of the Census Reports, as follows:—

Table 3.

From Table VIII.[1]—*Ratio of Deaths from Consumption in 1,000 deaths from all causes*:—

Of all males engaged in occupations	154
And of all male teachers	184
From Table IX.[2]:—	
Of all white males in (all) occupations	145
And of white male teachers	175
From Table XI.[3]:—	
Of all females in (all) occupations	215
Of all female teachers	256
From Table XII.[4]:—	
Of all white females in occupations	196
And of all white female teachers	251

The returns are both from census enumerators and from registrations. It may occur to you that in adding up we have often the same deaths twice over, but as this has been done *pari passu* with all occupations and with teachers (they being in the same table in each case), the *ratio* will not be affected.

It has been shown, then, from the actual official figures of the constituted authorities of Canada and the United States that the ratio of deaths from consumption amongst teachers has been largely above the average, and that although there has been a great improvement there is still great need for more in the interests of humanity and of this intelligent class in particular, and *pari passu* for the growing generation of children. In regard to England and Wales it can also be shown by quotations from Dr. Tatham, in 1897, that "they [the school teachers] suffer more heavily than do the clergy from pulmonary consumption." I have not succeeded, however, in obtaining statistics of teachers in what are called in Canada "public schools," dissociated from professors, tutors, etc., nor any statistics including female teachers.

The statement of the above conditions has caused surprise to some of our educationalists, and they have remarked that they have not noticed this prevalence of consumption. It may, therefore, be asked whether they have notices a prevalence of any other painless chronic affection. The sufferer usually withdraws from their observation before symptoms diagnostic of consumption attract their attention. Whereas lameness and rheumatism are readily noticed, and with sore throat, headaches, dyspepsia, the sufferers remain with us, and return to our notice with repeated attacks.

2. Our second enquiry is as to *the causes of this unsatisfactory showing*. The late Dr. Parkes stated that for the due maintenance of health each individual of a mixed community required 3,000 cubic feet of air per hour, and that with natural ventilation the air could be changed about three times per hour, thus necessitating a cubic air space of 1,000 feet.

[1] pp. 154-189.
[2] pp. 192-207.
[3] pp. 210-236.
[4] pp. 240-243.

The barrack regulations, trying to work the actual up to the ideal, laid down for the hardy soldier class a cubic space of 600 ft. with frequent change. Sanitarians in general have shared the views expressed by Drs. Parkes and De Chaumont. It has been thought that in the case of school children not much could be substracted from these figures, for although their bodies are smaller, their growth and tissue changes are more rapid.

The Provincial Board of Health of Ontario, after due enquiry and consideration of existing and desirable conditions, and of what might be practicable, recommended a minimum air-space of 500 cubic feet per pupil, with at least five changes per hour, any space above 12 ft. from the floor-line not to be counted in calculating the air-space.

It might be supposed that if the various sanitarians above referred to were capable of forming a correct judgment, and believed practicable what they said, any considerable deviation from their recommendations would be attended by just such results as we have found in the answer, from actual conditions of lung disease, to the first enquiry of our paper.

From replies to circulars, as well as from individual observation and measurements, it has been found that one-half the amounts laid down would form a very generous statement of the average in actual existence. Replies to a circular sent out by the Provincial Board of Health of Ontario to all the schools of the Province accorded with this statement.

Since that time there have been improvements in the amount of air-space, and to a more marked extent in artificial ventilation and more frequent changes of suitable air, which will account largely for the lessened death rate from consumption which has been noted.

Whilst the foul condition of the air of our schools can be detected by the senses of one coming freshly in from the outside air, the teacher becomes so accustomed to its gradual deterioration as not to notice its offensiveness, and you will sometimes be told that it is all right.

When the beneficial action of the open air—pure air—treatment for the cure of tuberculosis is so generally observed, it should also be readily admitted that impure, vitiated air has an equally baneful action in its production.

It is asserted by some that the inhalation of chalk dust at the blackboard is one of the causes of tuberculosis amongst teachers.

3. *Regarding the remedies* very little need be said to an audience of this character. To enter into the details of systems of ventilation would take up too much time; and the general principles are well known to those who make a careful study of the subject.

To my own students I have been in the habit of laying down four cardinal principles by which to test any system of ventilation. They are so self-evident that it may appear puerile to state them; and yet, like many other simple things, if we apply them as tests we shall find them very frequently violated: —

(1) That the air supplied should be pure and in sufficient quantity;

(2) That it should be of suitable temperature and degree of humidity when it reaches the inmates;

(3) That it should be evenly distributed, so as to reach all of them;

(4) That hot air is lighter than cold; that the former will rise, the latter fall, unless other forces otherwise influence them.

I have found well-planned systems of ventilation going astray from ignorance, carelessness, or obstinancy on the part of caretakers and other persons in charge—for example, closing fresh air inlets to such an extent as to lessen the amount of incoming air below the required minimum, in order to save firing, or from assuming to decide on what is necessary, or

sending used-up air back to the rooms. I have also seen a tendency because someone has blundered to abandon well-contrived systems, and go back entirely to the old window methods, excellent in their place, but unequal and insufficient in cold climates, often involving a violation of the second and third axioms which I have indicated.

There should be an inspection from time to time by the person who has installed the system, or some other competent authority. It should be seen to that the various rooms are receiving the regulation amount of air per head. This should be determined by the use of the air meter. It should also be made certain that it is coming from a pure source, and that it is properly moistened. Some accurate hygrometer should be used, and more attention paid to the thermometer. A maximum and minimum thermometer is a good check, and is not very costly. It is thought that much headache and catarrhal trouble are due originally to defective supply of moisture and improper temperature.

It should be ascertained that the incoming air circulates throughout the whole air-space before being drawn into the outlets. One simple method of finding this out is by carrying some slowly-burning material through the room during the absence of the pupils and observing the currents of smoke.

To do away with any effect the inhalation of chalk dust may have, I have been in the habit of recommending that the chalk eraser or cloth be dampened, so that the dust will not fly about.

Medical inspection of schools should also be of benefit in lessening the amount of tuberculosis.

There has been an improvement in schools in some places, both in the instalment of better plants in new schools and alterations in old ones. I have seen some unwholesome old rooms improved and economy thereby conserved, by adapting to them artificial systems of ventilation—fans or other motive power—forcing the air over heated coils and moistening contrivances; thermostatic regulation being added, leaving as little as possible to the caretaker's memory—making the system as automatic as possible with a due regard to economy.

One recent instance occurs to me in connection with one of our primary schools; here the crowd poison used to be quite perceptible. Recently I tested the supply of air, and found 2,600 ft. per head of pleasant, temperately-warmed air coming in overhead to a school room with fifty pupils, and, after being drawn across the room, passing out at the floor-line near the point of entrance. Here was a case where an old school was utilized, notwithstanding the difficulties of re-arranging the heating and ventilation of an old building.

4. *This Congress can give aid* in stating whether or not it makes any difference whether the quantities of fresh air recommended by sanitarians in the past are supplied to teachers and scholars. I may best explain by stating that school trustees and other school authorities have often said when certain air space and air change have been asked for, "Oh, these figures are impracticable." It is true that they are of old standing. Are they true of to-day? We had better have a modern pronouncement upon which we can proceed in our practical work. A statement from a representative body such as this, in the form of a resolution passed after due deliberation, should be of such weight and authority as to be of service.

At the proper time I trust that a suitable resolution, or series of resolutions, will be framed to help in conserving the lives of teachers and pupils in the school room, and in lessening the influence of "the school room as a factor in the production of tuberculosis."

[It was subsequently resolved by the Congress that a committee be appointed by the President to consider and report upon the amount of air-space and air per hour necessary in school rooms for the maintenance of health.]

APPENDIX S.—COUNTY

Name of Model School.	Name of Principal.	Certificate of Principal.	Salary of Principal.	Year of appointment	Time Principal devotes to Model School work daily during the term.	No. of assistants with first-class certificates.	No. with second class.
1 Athens	Jas. E. Burchell	I	$ 800	1907	All day.	.....	4
2 Barrie	W. J. Hallet, B.A.	I	1,000	1893	" ..	1	7
3 Beamsville	P. E. Payne	I	*245	1907	5½ hrs..	.....	3
4 Berlin	J. Suddaby	I	1,150	1877	All day.	.....	8
5 Bracebridge	A. Barber	I	*300	1907	" ..	3	4
6 Bradford	A. N. Scarrow	I	800	1902	" ..	.....	4
7 Brampton	Jas. A. Underhill	I	1,000	1903	" ..	1	8
8 Caledonia	John B. Widdis	I	800	1902	" ..	1	3
9 Chatham	J. W. Plewes	I	1,500	1900	" ..	1	24
10 Clinton	John Hartley	I	900	1907	" ..	.....	7
11 Cobourg	J. Burchill, M.A.	I	1,025	1907	5 hrs...	.....	9
12 Cornwall	S. J. Keys, B.A.	I	1,150	1902	All day.	.....	11
13 Durham	Thos. Allan	I	800	1888	5 hrs...	.....	4
14 Elora	J. G. Willson, B.A.	I	800	1907	All day.	.....	5
15 Forest	J. D. Williamson	I	700	1906	" ..	.....	5
16 Gananoque	J. C. Linklater	I	1,150	1888	" ..	.....	7
17 Goderich	Jas. H. Tigert	I	1,000	1902	" ..	3	6
18 Hamilton	J. B. Robinson, B.A., B.Paed.	I	1,200	1902	" ..	5	2
19 Ingersoll	H. F. McDiarmid	I	1,000	1885	" ..	2	12
20 Kincardine	John H. Garner	I	850	1906	" ..	.....	3
21 Kingston	A. A. Jordan	I	1,100	1907	" ..	1	7
22 Lindsay	G. E. Broderick	I	1,200	1888	" ..	1	19
23 London	J. H. W. McRoberts	I	1,300	1907	" ..	.....	10
24 Madoc	P. H. Huyck	I	800	1905	" ..	1	4
25 Meaford	M. N. Clark, B.A.	I	1,000	1899	" ..	.....	8
26 Milton	W. F. Inman	I	800	1893	" ..	2	4
27 Minden	W. G. Armour	II	575	1907	" ..	.....	1
28 Morrisburg	C. D. Bouck	I	750	1904	" ..	1	3
29 Mt. Forest	G. R. Theobald	I	950	1900	" ..	.....	5
30 Napanee	C. H. Edwards, B.A.	I	1,100	1899	" ..	1	8
31 Newmarket	W. M. Mitchell	I	1,000	1907	" ..	1	5
32 Norwood	Joseph Frappy	I	700	1907	" ..	.....	5
33 Orangeville	M. N. Armstrong	I	850	1885	" ..	2	8
34 Owen Sound	T. A. Reed	I	1,200	1894	" ..	2	25
35 Parry Sound	J. L. Moore	I	1,000	1907	.....	1	12
36 Perth	Cameron R. MacIntosh	I	900	1907	All day.	.....	8
37 Picton	T. C. Tice	I	1,050	1905	" ..	.....	6
38 Plantagenet Bilingual	V. Hector Gaboury	I	*500	1906	" ..	.....	1
39 Port Perry	R. F. Downey, B.A.	I	900	1902	" ..	.....	3
40 Prescott	W. W. Thompson	I	1,000	1907	" ..	.....	7
41 Renfrew	C. Ramsay	I	900	1907	" ..	.....	8
42 St. Thomas	J. M. McCutcheon, B.A.	I	1,200	1907	" ..	5	25
43 Sault Ste. Marie	J. M. Kaine	I	1,200	1904	" ..	1	6
44 Sarnia	W. J. Karr, B.A., B.Paed.	I	950	1906	" ..	.....	9
45 Simcoe	Isaac S. Rowat	I	800	1889	" ..	1	6
46 Stratford	Jas. H. Smith, B.A.	I	1,000	1907	" ..	2	27
47 Strathroy	Thos. Dunsmore	I	850	1882	" ..	.....	9
48 Toronto	Henry Ward, B.A.	I	1,450	1906	" ..	1	10
49 Toronto Junction	Wm. Wilson	I	1,300	1889	" ..	1	10
50 Vankleek Hill	S. A. Hitsman	I	900	1904	" ..	1	3
51 Walkerton	Jas. Campbell	I	870	1906	" ..	1	7
52 Welland	John Flower	I	800	1905	" ..	.....	6
53 Whitby	J. A. Brown	I	950	1877	" ..	.....	4
54 Windsor	M. P. McMaster	I	1,100	1907	" ..	2	8
55 Woodstock	S. Nethercott	I	1,050	1893	" ..	.....	22
Totals	12 University Graduates	54 I; 1 II	§$983	.....	.....	45	445

* For the term. † Principal appointed for Model School term only. ‡$150 for 1906.

MODEL SCHOOLS, 1907.

	No. with third class.	No. with other class.	Time assistant relieved Principal from Public School work daily.	Is separate room provided?	No. of volumes in professional library.	Government grant.	Municipal grant.	Fees.	No. of divisions in school or schools.	No. of divisions used for Model School purposes.	No. of students sent at one time to observe or to teach.	Length of time students are trained before being sent to the divisions to observe.	Length of time students are trained before being sent to the divisions to teach.
1	1	..	All day.	Yes	27	$150	$150	$130	5	5	5	3 weeks	4 weeks
2	..	..	" ..	"	165	150	150	200	8	8	5	6 "	6 "
3	1	..	" ..	"	194	150	150	75	4	4	4	4 "	5 "
4	1	..	" ..	"	162	300	300	212	9	9	8	6 "	6 "
5	1	3	" ..	"	188	300	.....	80	11	10	3 or 4	6 "	8 "
6	..	..	" ..	"	156	150	150	200	4	4	5	6 "	7 "
7	..	..	" ..	"	163	150	250	75	9	7	3 or 4	6 "	7 "
8	..	..	" ..	"	175	150	150	80	4	4	4	7 "	7 "
9	1	6	" ..	"	530	150	150	200	26	26	3 or 6	3 "	6 "
10	1	..	4 hrs...	"	170	150	150	220	8	8	5 or 6	3½ "	5 "
11	..	2	5 " ...	"	50	150	250	150	10	9	3 or 4	6 "	7 "
12	1	..	All day.	"	300	150	150	190	12	12	3 or 4	3 "	6 "
13	..	1	5 hrs...	No	100	150	150	50	8	5	5	4 "	8 "
14	..	..	†	Yes	160	150	150	110	5	5	5	4½ "	6 "
15	..	..	All day.	"	166	150	150	120	6	5	4 or 5	6 "	7 "
16	5	..	" ..	"	206	150	150	20	12	6	2	6 "	8 "
17	2	..	" ..	"	168	150	150	185	11	11	4 or 5	6 "	6 "
18	2	2	" ..	"	650	150	150	140	10	9	2	4 days ..	7 "
19	1	..	" ..	"	171	150	150	56	15	12	3	5 weeks	6 "
20	3	..	" ..	"	153	150	150	90	6	6	3	6 "	6 "
21	..	..	" ..	"	230	150	150	135	8	8	2 or 3	6 "	6 "
22	..	..	" ..	"	150	150	150	190	20	19	2	5 "	7 "
23	..	..	" ..	"	146	150	150	105	10	7	3	2 "	5 "
24	..	..	" ..	"	275	150	250	130	5	5	5 or 6	4 "	6 "
25	..	..	" ..	"	163	150	150	150	9	8	4	6 "	7 "
26	1	..	" ..	"	164	150	240	100	7	5	4 or 5	6 "	6 "
27	1	..	" ..	"	140	150	150	35	3	3	3 or 4	3 "	4 "
28	2	..	5½ hours	"	150	150	150	115	6	6	5	6 "	6 "
29	2	..	All day.	"	175	150	150	130	7	7	3 or 4	7 "	7 "
30	1	..	" ..	"	300	150	150	265	10	9	6	6 "	6 "
31	1	..	" ..	"	186	150	175	120	7	7	4	4 "	5 "
32	..	..	" ..	"	165	150	150	195	5	5	8	4 "	6 "
33	..	..	" ..	"	169	150	150	50	10	10	5	6 "	8 "
34	1	6	.....	"	240	150	150	215	32	13	4	5 "	8 "
35	2	..	.....	No	200	300	.....	35	13	12	7	3 "	6 "
36	2	..	All day.	Yes	150	150	150	10	8	8	3 or 4	4 "	6 "
37	1	1	" ..	"	140	150	150	120	8	8	3	5 "	5 "
38	1	1	" ..	"	30	‡300	450	.....	3	3	5 or 6	1 "	7 "
39	2	..	" ..	"	173	150	150	75	5	5	3	6 "	6 "
40	..	..	" ..	"	210	150	150	105	7	7	3	7 "	7 "
41	1	..	" ..	"	135	150	150	200	9	9	4 or 5	5 "	6 "
42	3	..	" ..	"	187	150	150	135	33	33	3 or 4	4 "	6 "
43	1	..	" ..	"	84	300	.....	115	7	7	4	6 "	6 "
44	..	..	" ..	"	165	150	150	95	9	9	2 or 3	6 "	6 "
45	..	..	" ..	"	247	150	150	70	8	8	2	6 "	7 "
46	1	..	" ..	"	700	150	150	265	30	29	2 or 3	6 "	6 "
47	..	..	" ..	"	178	150	150	115	9	9	2 or 3	6 "	6 "
48	..	..	" ..	"	261	150	.....	90	12	11	19	1 "	6 "
49	..	..	" ..	"	150	150	150	50	11	11	3	6 "	6 "
50	..	..	" ..	"	212	150	450	75	4	4	4	3 "	7 "
51	..	..	" ..	"	175	150	150	105	9	9	3	6 "	6 "
52	1	..	" ..	"	100	150	150	55	7	7	2 or 3	5 "	6 "
53	..	3	" ..	"	199	150	150	85	7	7	5 or 6	6 "	7 "
54	..	..	.....	"	145	150	150	140	12	9	3	6 "	6 "
55	3	2	All day.	"	300	150	150	100	28	20	2	6 "	8 "
	47	29	.....	....	10,848	$9,000	$8,815	$6,558	....	.....	.....	.....	.....

§ Average annual salary.

APPENDIX S.—COUNTY

Name of Model School.	No. of weeks students teach in the divisions.	How long per day?	Number of classes in the divisions used for Model School purposes.	Average number of lessons taught by each student during the term.	Average number of lessons each class will be taught by all the students during the term.	How long per day?	Time students remain in a division before passing to another.
1 Athens	8	2 hrs 3 dys a wk	11	20	47	20 minutes	1 week
2 Barrie	8	40 to 60 mins.	20	16	32	17 "	1 "
3 Beamsville	6 to 7	2 hours	10	20	30	30 "	1 "
4 Berlin	6	1¾ "	14	14	41	20 "	1 "
5 Bracebridge	6	1½ "	25	23	15	20 "	3 days
6 Bradford	6	1¾ "	10	16	64	20 "	2 "
7 Brampton	6	1 to 1½ hrs.	13	20	23	20 "	4 "
8 Caledonia	6	1 to 2 "	10	20	32	25 "	1 week
9 Chatham	6	1 hour	35	20	23	20 "	1 "
10 Clinton	8	1¾ hours	19	17	39	20 "	4 days
11 Cobourg	4	1½ "	9	18	60	25 "	1 "
12 Cornwall	5	1½ "	24	20	32	20 "	2 "
13 Durham	4	1 hour	12	20	16	20 "	3 "
14 Elora	7	20 m 3 dys a wk	10	20	44	20 "	
15 Forest	6	1½ hours	17	18	25	20 "	1 week
16 Gananoque	6	⅔ "	14	21	6	20 "	1 "
17 Goderich	5	1⅔ "	37	20	20	20 "	4 days
18 Hamilton	7	20 to 35 mins.	128	25	9	25 "	2 "
19 Ingersoll	6	1¼ hours	16	14	10	17 "	1 week
20 Kincardine	6	1½ "	15	18	21	20 "	1 "
21 Kingston	5	40 mins to 1 hr.	35	18	14	25 "	1 "
22 Lindsay	5	40 to 60 mins.	40	20	19	20 "	2 days
23 London	8	1¼ hours	7	18	54	20 "	3 "
24 Madoc	5	2½ to 3 hrs.	13	20	40	20 "	2 "
25 Meaford	6	1½ hours	10	20	60	20 "	1 "
26 Milton	6	1⅓ "	18	20	21	20 "	1 week
27 Minden	5	2½ "	9	16	12	20 "	1 "
28 Morrisburg	6	1¾ "	15	18	30	20 "	1 "
29 Mount Forest	5	1¼ "	16	20	33	20 "	2 days
30 Napanee	5	2½ "	15	23	80	25 "	1 week
31 Newmarket	9	1½ hr 3 dys a wk	19	19	24	25 "	1 "
32 Norwood	6	1½ hours	11	16	50	20 "	2 days
33 Orangeville	5	1 "	20	20	10	20 "	1 week
34 Owen Sound	4	1½ "	20	17	36	20 "	2 days
35 Parry Sound	6	¾ "	12	20	12	20 to 25 "	1 week
36 Perth	8 to 9	5⅓ "	20	20	32	20 "	1 "
37 Picton	8	1 "	10	24	58	20 "	1 "
38 Plantagenet Bilingual	6	2½ "	11	17	25	20 "	1 "
39 Port Perry	6	1 to 1½ hrs.	12	23	29	20 "	1 "
40 Prescott	6	1⅓ hours	15	20	28	23 "	1 "
41 Renfrew	6	1½ "	17	18	42	20 "	1 "
42 St. Thomas	5	1⅓ "	33	22	18	20 "	4 days
43 Sault Ste. Marie	4	1 "	13	17	30	20 "	4 "
44 Sarnia	6	1¼ "	20	20	19	20 "	3 "
45 Simcoe	4	1½ "	14	24	22	20 "	2 "
46 Stratford	6	1½ "	29	26	47	20 "	5 "
47 Strathroy	6	1 "	24	24	23	20 "	2 to 3 days
48 Toronto	6	1 "	11	20	33	30 "	1 week
49 Toronto Junction	6	1 "	15	18	12	20 "	3 days
50 Vankleek Hill	5	1½ "	11	20	27	17 "	1 week
51 Walkerton	6	1 "	12	18	31	20 "	3 days
52 Welland	7	1 "	14	17	13	20 "	2 "
53 Whitby	7	2½ "	17	25	25	20 "	4 "
54 Windsor	5	1¼ "	12	9	20	20 "	2 "
55 Woodstock	5	1 "	20	20	20	20 to 35 "	4 "
Totals							

MODEL SCHOOLS, 1907.—Concluded..

No.	No. of students on roll.	Male.	Female.	Number who passed the examination. Male.	Female.	Total.	Number with Senior Teachers' standing.	Number with Junior Teachers' standing.	Number with District certificate standing, or standing lower than Junior Teachers'.	Number of renewals granted by the Board.	Average age of students.
1	26	8	18	7	17	24	....	26	.....	8	18 years
2	40	15	25	15	25	40	1	23	16	14	19.9 "
3	15	....	15	....	15	15	....	7	8	9	18 "
4	42	6	36	5	34	39	4	24	14	7	18.3 "
5	16	1	15	1	15	16	....	.....	16	13	18.4 "
6	40	14	26	14	25	39	...	11	29	7	18 "
7	15	6	9	6	9	15	2	8	5	4	18.6 "
8	16	5	11	5	11	16	2	14	.....	7	18.4 "
9	40	14	26	13	25	38	3	31	6	10	18.75 "
10	44	18	26	18	26	44	1	37	6	5	18 "
11	30	13	17	12	17	29	1	21	8	1	18.96 "
12	38	5	33	5	33	38	2	12	24	12	18 "
13	10	3	7	3	7	10	....	5	5	7	18.2 "
14	22	10	12	10	12	22	3	19	.....	6	18 "
15	24	13	11	13	11	24	2	20	2	.....	18 "
16	4	1	3	1	3	4	....	4	.....	3	18.75 "
17	38	13	25	13	25	38	3	29	6	11	18 "
18	28	4	24	4	24	28	2	24	2	3	18.7 "
19	12	7	5	6	5	11	1	11	.....	.....	18 "
20	18	3	15	3	15	18	....	10	8	15	18.77 "
21	27	7	20	7	20	27	2	13	12	12	18 "
22	38	10	28	6	15	21	3	17	18	9	19 "
23	21	4	17	4	17	21	2	16	3	1	18.6 "
24	26	6	20	6	19	25	....	15	11	6	18 "
25	30	10	20	10	20	30	4	19	7	4	19 "
26	19	5	14	5	14	19	1	5	13	4	18.6 "
27	7	1	6	1	6	7	....	.....	7	.....	18.3 "
28	25	4	21	4	21	25	1	11	13	.....	19 "
29	26	5	21	5	21	26	1	24	1	6	18.6 "
30	53	10	43	9	42	51	2	24	27	9	18 "
31	24	6	18	5	15	20	....	14	10	1	19 "
32	39	11	28	11	28	39	....	21	18	3	18.1 "
33	10	4	6	4	6	10	....	10	.....	6	18 "
34	43	16	27	16	27	43	5	27	11	4	18.5 "
35	7	....	7	....	7	7	....	1	6	11	20 "
36	32	8	24	8	24	32	7	23	2	.....	18 "
37	24	3	21	3	20	23	1	14	9	6	18.2 "
38	16	3	13	3	13	16	....	.....	16	.....	18.7 "
39	15	9	6	9	6	15	2	9	4	6	18.6 "
40	21	11	10	11	10	21	3	18	.....	8	18.05 "
41	40	5	35	5	35	40	1	11	28	14	18.67 "
42	27	5	22	4	22	26	3	19	5	10	18.2 "
43	23	1	22	1	22	23	....	6	17	8	18 "
44	19	10	9	10	9	19	1	18	.....	.....	19 "
45	13	5	8	4	8	12	....	9	4	6	18 "
46	53	22	31	21	30	51	9	44	.....	8	18 "
47	23	5	18	5	18	23	3	20	.....	1	18.87 "
48	19	....	19	....	17	17	....	18	1	.....	18 "
49	10	1	9	1	9	10	....	6	4	1	17.8 "
50	15	4	11	4	11	15	2	5	8	10	18.4 "
51	21	3	18	3	18	21	....	12	9	9	18 "
52	11	2	9	2	9	11	1	4	6	6	17 "
53	17	3	14	3	14	17	2	11	4	3	18.5 "
54	28	2	26	2	26	28	1	23	4	8	19 "
55	20	5	15	5	15	20	4	15	1	8	18.2 "
	1,360	365	995	351	968	1,319	88	838	434		18.37 years

APPENDIX T.—PROVINCIAL NORMAL AND MODEL SCHOOLS.

1.—PROVINCIAL NORMAL AND MODEL SCHOOLS, TORONTO.

JANUARY, 1908.

1. Staff of Toronto Normal School.

Wm. Scott, B. A.	Principal.
W. H. Elliott, B.A.	Vice-Principal.
D. D. Moshier, B. A., B. Pæd.	English Master.
S. Silcox, B. A., D. Pæd.	Science Master.
A. C. Casselman.	Drawing Master.
A. T. Cringan, Mus. Bac.	Music Master.
Jas. H. Wilkinson.	Instructor in Manual Training.
Miss Nina A. Ewing.	Instructor in Household Economics.
Miss Mary E. Macintyre.	Instructor in Kindergarten Principles.
Mrs. Jean Somers.	Instructor in Calisthenics.
Mrs. Emma Macbeth.	Instructor in Needlework.
Q.-M. Sergt. J. S. Legge.	Instructor in Drill.
Mrs. M. W. Brown.	Instructor in Reading.

Students Admitted, Session 1907-8.

Male	4
Female	177
Total	181

2. Staff of the Provincial Model School, Toronto.

Angus McIntosh.	Head Master.
Miss M. Meehan.	First Female Assistant.
R. W. Murray, B. A.	First Male Assistant.
Miss May K. Caulfeild.	Assistant.
Thomas M. Porter.	Assistant.
Miss A. F. Laven.	Assistant.
Milton A. Sorsoleil.	Assistant.
Miss Hope Merritt.	Assistant.
Miss F. M. Taylor.	Assistant.
Miss A. E. G. Wilson.	Assistant.
A. C. Casselman.	Drawing Master.
A. T. Cringan, Mus. Bac.	Music Master.
Miss Mary E. Macintyre.	Kindergarten Directress
Miss Ellen Cody.	Kindergarten Assistant.
Mrs. Jean Somers.	Instructor in Calisthenics.
Mrs. Emma Macbeth.	Instructor in Needlework.
Q.-M. Sergt. J. S. Legge.	Drill Master.
Guy de Lestard.	French Master.
Jas. H. Wilkinson.	Instructor in Manual Training.
Miss Nina A. Ewing.	Instructor in Household Economics.

Number of pupils in 1907	529
Number of Kindergarten pupils in 1907	53

II.—PROVINCIAL NORMAL AND MODEL SCHOOLS, OTTAWA.

JANUARY, 1908

1. Staff of Ottawa Normal School

J. F. White, LL. D.	Principal.
S. B. Sinclair, M. A., Ph. D.	Vice-Principal.
S. A. Morgan, B. A., D. Pæd.	English Master.
J. F. Power, M. A.	Science Master.
Roy F. Fleming.	Drawing and Writing Master.
T. A. Brown	Music Master.
Mrs. Alex. Fraser.	Instructor in Elocution.

C. Emery.....Instructor in Physical Culture.
Miss Eliza Bolton.....Lecturer on Kindergarten Principles.
Miss A. Enid Robertson.....Lecturer on Household Science.
J. S. Harterre.....Instructor in Manual Training.

Students Admitted, Session 1907-8.

Male	6
Female	97
Total	103

2. Staff of Provincial Model School, Ottawa.

J. H. Putman, B. A., B. Paed.....Head Master.
F. A. Jones, B. A.....First Assistant and Drill Instructor.
J. A. Dobbie.....Second Assistant.
E. Cluff, B. A.,.....Third "
Miss M. E. Butterworth.....First Female Assistant.
Miss A. G. Hanahoe.....Second " "
Miss J. Foster.....Third " "
Miss A. Delaney.....Part II Class (Boys and Girls).
Miss M. R. Elliott.....Fifth Female Assistant.
Miss Eliza Bolton.....Kindergarten Directress.
Miss A. H. Baker.....Kindergarten Assistant.
Roy F. Fleming.....Drawing and Writing Master.
T. A. Brown.....Music Master.
Mrs. Alex. Fraser.....Teacher of Reading.
C. Emery.....Teacher of Physical Culture.
Miss A. Enid Robertson.....Teacher of Household Science.
J. Fleury.....Teacher of French.
J. S. Harterre.....Manual Training Instructor.

Number of pupils, 1907	339
Number of Kindergarten Pupils, 1907	58

III.—PROVINCIAL NORMAL SCHOOL, LONDON.

JANUARY, 1908.

Staff of London Normal School.

F. W. Merchant, M. A., D. Paed.....Principal.
John Dearness, M. A.....Vice-Principal.
S. J. Radcliffe, B. A.....English Master.
Duncan Walker, B. A.....Mathematical Master.
S. K. Davidson.....Drawing Master.
Fred L Evans.....Music Master.
J. W. Westervelt.....Writing Master.
Miss Ada Butchart.....Instructor of Household Science.
Albert Slatter.....Physical Instructor.
Miss Jean R. Laidlaw.....Teacher of Kindergarten Principles.
Sugden Pickles.....Manual Training Instructor.

Students Admitted, Session 1907-8

Male	13
Female	131
Total	144

APPENDIX U.—HIGH SCHOOL CADET CORPS, 1907.

Name of School.	Number of Officers, N. C. Officers and Boys present at time of inspection.	Drill.	Remarks of Militia Officers on the Efficiency of the Corps.
Arthur	36	Very good....	Satisfactory
Barrie	83	Very good....	Satisfactory
Brantford	48	Very good....	Satisfactory
Brockville	35	Very good....	Satisfactory
Cobourg	41	Very good....	Satisfactory
Collingwood	40	Good.....	Satisfactory
Cornwall	47	Good.....	Satisfactory
Dundas	30	Very good....	Satisfactory
*Fort William	28	Good.....	Satisfactory
Galt	38	Very good....	Satisfactory
Goderich	42	Good.....	Satisfactory
Guelph	92	Very good....	Satisfactory
Hamilton	30	Very good....	Satisfactory
Ingersoll	39	Good.....	Satisfactory
Lindsay	39	Very good....	Satisfactory
London	36	Good.....	Satisfactory
†Mount Forest	36	Fair.....	Unsatisfactory
Napanee	39	Very good....	Very satisfactory
*Niagara Falls	31	Good.....	Satisfactory
Norwood	26	Very good....	Satisfactory
Orillia	40	Good.....	Satisfactory
Ottawa	55	Very good....	Satisfactory
Owen Sound	51	Very good....	Satisfactory
Peterborough	112	Very good....	Entirely satisfactory
Port Perry	31	Very good....	Satisfactory
†Ridgetown	24	Poor.....	Unsatisfactory
St. Catharines	45	Very good....	Satisfactory
St. Thomas	58	Very good....	Satisfactory
Sarnia	37	Good.....	Satisfactory
Seaforth	44	Good.....	Satisfactory
Strathroy	34	Good.....	Satisfactory
Toronto:			
Harbord	45	Good.....	Satisfactory
Jameson	30	Good.....	Satisfactory
Jarvis	46	Very good....	Satisfactory
Public Schools, Toronto:			
A Company	44	Good.....	Satisfactory
B "	49	Very good....	Satisfactory
C "	48	Good.....	Satisfactory
D "	49	Good.....	Satisfactory
E "	45	Good.....	Satisfactory
F "	48	Good.....	Satisfactory
Uxbridge	40	Very good....	Satisfactory
Woodstock	85	Excellent....	Satisfactory
Total	1896 42 Corps		

* Not enough qualified members to entitle school to a grant.
† Not entitled to a grant owing to unsatisfactory report on efficiency.

APPENDIX V.—SUPERANNUATED TEACHERS.

(Continued from Report of 1906.)

*I. Allowances Granted during 1907.

Register Number.	Name.	Age.	Post Office.	Years of Service.	Allowance.
					$ c.
1163	Wilson, Thomas C	72	Kingston	23	161 00
1164	Hubbard, Duncan M	45	Newport	20	135 00
1165	Reavley, Albert Willson	60	Ridgeway	22	154 00
1166	Palmer, Levi C	59	Kingsville	18½	128 00
1167	Burrows, Frederick	65	Napanee	47	322 00
1168	Lennox, Robert R	63	Shannonville	33½	234 50
1169	Armistead, Samuel F	55	Vancouver, B.C	31	217 00
1170	Lyons, Thomas	62	Admaston	19½	117 00
†1171	Cork, George	67	Waterloo	45	314 00
†1172	Kidd, Malcolm R	60	Auburn	29½	203 00
1173	Campbell, Cassius	60	Ottawa	38½	269 50
†1174	Barnes, Charles A	61	Petrolea	41	287 00

Summary for Years 1882–1907.

Year.	Number of teachers on list.	Expenditure for the year.	Gross contributions to the fund.	Amount refunded to teachers.
		$ c.	$ c.	$ c.
1882	422	51,000 00	13,501 08	3,660 10
1887	454	58,295 33	1,489 00	3,815 80
1892	456	63,750 00	1,313 50	786 86
1897	424	62,800 33	847 00	620 27
1902	407	64,244 92	1,073 50	722 78
1906	382	63,190 00	667 00	542 87
1907	375	63,018 55	766 00	764 54

Four teachers' subscriptions were withdrawn from the fund during 1907.

*As the sum of $4 is deducted from each Superannuated Teacher's allowance, as subscription to the fund, the payments were $4 less in each case than given in this list.

†Allowance commences with 1908.

APPENDIX W.—LIST OF CERTIFICATES ISSUED BY THE EDUCATION DEPARTMENT, 1907.

1. *Public School Inspectors.*

Clark, Luther John, B.A.
Carpenter, William Grant, B.A.
Froats, James, B.A.
Froats, Willis Charles, M.A.
Hodgson, Joseph Emerson, B.A.
Ingall, Elmer Ellsworth, B.A.
Morrison, Edward, B.A.
Martin, Stephen, B.A.
Mitchener, James Lidney, B.A.
Pettit, Louis John, B.A.
Rogers, Joseph Whyte, B.A.
Smith, Thomas Corlett, B.A.
Simpson, Benjamin L., M.A.
Sprung, Whitfield Lyman, B.A.
Truscott, Samuel Alfred, M.A.
Wethey, Edmund James, B.A.

2. *High School Principals and Specialists.*

Ayres, Marion Huntley, M.A. (Science).
Andrews, David, M.A. (Mathematics).
Anderson, Frank Cecil, B.A. (Science and Commercial).
Bell, John Johnston, B.A.
Bale, George Sidney, B.A. (Moderns and History).
Clark, Luther John, B.A.
Carpenter, William Grant, B.A. (Science).
Donaldson, William, B.A. (Science).
Ferguson, George Arthur, B.A. (Classics).
Foster, Jessie, B.A. (French and German).
Gray, Neil Roy, B.A.
Girdwood, Arthur Reginald, B.A. (Mathematics).
Graham, Robert Readie, B.A.
Hutchison, Robert Alexander, B.A. B.A. (Mathematics).
Jermyn, Percy T., M.A. (English and History).
Jennings, Edwin William, B.A. (English and History).
Lawlor, Richard Gardiner, B.A.
Lick, Addie, B.A. ((Mathematics).
MacDonald, James, M.A. (English and History).
Macdougall, Graham, B.A. (Classics).
McKinnon Charles, B.A. (Classics).
Marty, Sophia E., M.A. (English, History, French and German).
Malcolm, Wyatt, M.A.
Morrison, William, B.A.
Pettit, Louis John, B.A. (English and History).
Sine, Frederick, M.A.
Sexsmith, William Newton, B.A.
Simpson, Benjamin L., M.A. (Mathematics).
Truscott, Samuel Alfred, M.A. (Mathematics).
Walker, Arthur John, B.A.
Williams, Walter Herbert, M.A. (Moderns and History).

3. *High School Assistants and Specialists.*

Amoss, Flora Ross, B.A. (Moderns and History).
Anderson, Jessie Inglis, B.A. (Moderns and History).
Baird, Mabel Margt. J., B.A. (Moderns and History).
Baird, William. (Commercial).
Blyth, Sara.
Baker, Albert Henry, B.A. (Science).
Cruickshank, Libbie.
Cook, Gertrude Agnes, B.A. (Classics).
Clark, George A.
Delmage, Edith Rachel B.A. (Mathematics).

Edward, Wesley Grafton. (Commercial).
Eby, Florence Mary, B.A.
Fleming, Maude E., B.A. (Moderns and History).
Gordon, Mary M. Mc.
Hughes, Frank Joseph. (Commercial).
Hood, Finlay.
Hatch, Salem Barton. (Commercial).
Jamieson, Clinton Egerton. (Commercial).
Kidd, Truman W.
Keegan, Joseph D.
Leighton, C. Edna.
McNab, Elizabeth Mary, M.A.
McLellan, Kate. (Commercial).
McCormack, Samuel G., M.A.
Miller, Nannie, M.A. (Commercial).
Merrish, Celia Winnifred, B.A. (Moderns and History).
Mercer, John S. (Manual Training).
Ogilvie, Alvin Irwin.
Preston, Ethel Ada.
Rundle, John Ashton.
Robertson, George A., B.A. (Science).
Reid, Thomas Emerson, B.A.
Sanders, Charlotte Annie, B.A. (Science).
Smith, Lillias Pearl, B.A.
Sweeney, Agnes Calvary.
Tennant, Isabella Leathern, B.A. (Moderns and History).
Teskey, Kathleen, M.A. (Moderns and History).
Williams, Albert.
Wilson, Ethel M.
Wegg, Charlotte Sophia, B.A.
White, Katie E.
Wood, Frank Herbert, B.A. (Mathematics).
Wilkinson, James Egerton. (Commercial).
Youngson, Mary, B.A.
Young, Albert.

4. *Summary of Public School Certificates.*

——	Male.	Female	Total.
First class	39	76	115
Second class	19	297	316
Third class and District, per County Model School reports	351	968	1,319

5. *First Class Certificates.*

A.

Allardice, Jessie R.
Allen, Lillian May.
Abbott, Ada C.
Anderson, Beatrice E.

B.

Burrow, Effie H.
Burns, Maud Ethel.
Baker, Albert H., B.A.
Banes, Percy S.
Bowden, Wm. Lewis.
Burchell, Jas. E.
Burns, Edna Muriel.

C.

Clare, Agnes M.
Cox, Bertha E.
Campbell, Geo. Alex.
Carr, Margaret MacKinlay.
Casselman, Colborne L.
Cleminson, Frank A. (Honours).
Clifford, Margaret.
Cowles, Jno. P. (Honours).

D.

Doner, Amy Augusta.
Dadson, Helena, B.A.
Delaney, Annie Maria.
Drewry, Mabel.
Day, Leta Evelyn.

E.

Edmunds, Lulu J.
Eastman, Mary M.

F.

Freeman, Etta M.
Ferguson, Jno.
Firth, Jos. Wilson, B.A.
Flock, Frank Arthurs, B.A.
Forbes, Edith.
Forester, Maggie.

G.

Good, Ethel. (Honours).
Good, Frances A.
Garret, Evelyn C.

H.

Hancock, Ernest Wm.
Hamilton, Wm. Brown.
Harrison, Fred. Wm.
Henderson, Henry Robt.
Hill, Bertha M.
Hoover, Edwin Egbert.
Hugill, Mary H.
Hockey, A. Eveline.
Hollingshead, John Edwin, B.A. (Honours).

J

Jamison, Alice May.
Jeckell, Laura M.
Jenner, Alice M.
Joness, Beatrix.

K.

Kerr, Ruby A.
Kilgour, Ella Gertrude.

L.

Laird, Marie Ettie.
Lownsberry, Annabella.
Lobb, Jean E.
Lang, Mamie.
Lindsay, Edwin Herman.
Lindsay, Fia Augusta.
Linklater, Jessie Laura.
Leitch, Alex. G.
Latam, Oliver L.

M.

Miller, Gertrude E. C.
Murray, Marion W. B.
Madge, Myrtle.
Mann, Harry Clarke, B.A. (Honours).
Morley, Dolly.
Morrison, Delle Selena.
Moyer, Chas. H. Cecil.
Martin, Ellen.
Montgomery, Margaret P.
Martin, Holby Oldham.

Mc.

McLeish, Annie May.
McArthur, Jennie B.
McCormack, Mary Irene.
McDonald, John Alex.
McGill, David H.
McIntosh, Annie M.
McKinnon, Ellis S.
McLeish, Kathleen C.
McArthur, Margaret.
Macdonald, Mina.

O.

O'Donohue, Jno. Albert.
O'Donnell, Thos. J.
Osborne, Florence Ethel.

P.

Payne, Muriel Constance.
Patmore, Edna J.
Pushman, Robt. Geo. (Honours).

R.

Rodgers, Bertha M.
Ross, Marion Lillie.
Rutledge, Geo. E.

S.

Stock, Margaret Isabelle.
Scott, Wm. W.
Simon, Sadie.
Smith, Ella Byre.
Smith, Janet.
Smith, Mary Elizabeth.

Smith, S. Louise.
Speirs, Thos. E.
Spragge, Mabel.
Stone, Grace Lorena.
Suttaby, Emily Alice.
Sweet, Fred. Geo.
Shillinglaw, Emily.
Shultz, Amelia Louise.

T.

Turner, Olive Matilda.

W.

Waters, Caroline Frances.
Warren, Christina Jane.
Wait, Smith Austin.
Wallace, Thos. Jos.
Wheelton, Leonard.
Williamson, Jas. David.
Wilson, Blanche A.
Woodley, Arthur Milton.
Wright, Pearl Evelyn.
Whittaker, Martha E.
Wise, Elsie Mary.
Warren, Alvin M.

6. *Second-Class Certificates.*

A.

Adam, Effie.
Arnold, Ida A.
Affleck, Lucy Livingston.
Ashman, Ethel Frances. (Honours).
Austin, Lilian Edna.
Anderson, Chas. Wesley. (Honours).
Anderson, Cora Elva. (Honours).
Anthes, Grace Amelia.
Arthur, Edith Myrtle.
Austin, Jean Stirling.

B.

Baugh, John F.
Baugh, Percy L.
Bennett, Margaret.
Blackburn, Allie. (Honours).
Brown, Clara E.
Brown, Jane.
Byers, Chas. H.
Bennington, Florence.
Berry, Minnie Irene.
Blackburn, Estella M.
Boggs, Alice Grace.
Boulger, Anna.
Bowers, Libbie.
Brisbin, Mabel Edna. (Honours).
Bain, Jean Eliz.
Banting, Edythe Amy.
Barlow, Amelia.
Beecroft, Wm. Alvery.
Bensley, Helen.
Benson, Vivian Henrietta.
Borrowman, Roberta B. (Honours).
Boyce, Bessie.
Bradley, Kathleen.
Broadfoot, Grace M
Broadfoot, Martha W.
Brown, Ethel Lillie. (Honours).
Burt, Beatrice Ellen.
Burt, Catharine May. (Honours)

C.

Callahan, Edw. Luke.
Campbell, Lily M.
Campbell, M. Maud.
Crawford, Janet A.
Creighton, Georgina.
Crispin, Minnie Emily.
Curry, Ethel Maria.
Caswell, Hattie Ida.
Chalmers, Louisa.
Coleman, Treza.
Coskeran, Nora Marie.
Coulthart, Hebert.
Calvert, Jessie Wilson.
Campbell, Lizzie Edna.
Cook, Eva Maud.
Cooper, Olive.
Crone, Eliz. Margaret. (Honours).
Crow, Mrs. Arthur F.
Curtis, Leita V. (Honours).
Cummer, Frankie Tessie.
Cleary, Margaret.
Campbell, Mary E. F. (Honours).

D.

Dean, Alberta.
Durnin, Minnie J.
Davis, Annie Edith.

Dickson, Mary McLaren.
Dolan, Edith Eleanor.
Donald, Mamie.
Dell, Maude.
Donogh, Sara Marjorie.

E.

Elliott, Mayme.
Ellis, E. Grace.
English, Alberta.
English, Effie May.
Eastman, Katherine I.
Ellsworth, Warren A.
Elrick, Jean Ann.
English, Bertha.
Evans, Libbie Matilda.
Eves, Viola Olivia.
Ewart, Eva.

F.

Flannagan, Katherine.
Ford, Catherine. (Honours).
Ford, Letitia.
Ford, Myra D.
Fox, Margaretta.
Freek, Ethel May.
Fenton, Kathleen Millar. (Honours).
Fairty, Josephine E.

G.

Gammon, Vera Maude.
Garbutt, Arthur Earl. (Honours).
Gilchrist, Lilian Maude.
Goodall, Laura Marjorie.
Gray, Emma Eliz.
Graydon, Olive.
Guiry, Celia.
Gallagher, Effie May.
Garr, Agnes Julia.
George, Minnie.
Gibson, Addie Thompson.
Golden, Maude.
Goldsborough, Gertrude.
Gordon, Lillian.
Grant, Fern.
Guilford, Ellen Grace.

H.

Harte. Janet McLaren.
Hayton, Eva.
Hodgson, Jennie.
Hunter, Lora.
Hutton, Cassie M.
Hagerman, Luthera May.
Hamilton, Ethel Florence.
Hanna, Muriel Agnes.
Harrison, Hattie.
Hinchey, Laura.
Hall, Annie.
Hamilton, Bessie.
Harris, Eunice.
Harris, Genevieve.
Harrison, Amelia Irma.
Henry, Annie Crawford.
Hogg, Rebecca May.
Holliday, Jessie May. (Honours).
Holliday, Marion Edna.
Hope, Ida Belle.
Howson, Ada Irene.
Hughes, Viola Irene.
Hunter, Nellie Evelyn. (Honours).
Hyde, Estella Beatrice.
Hamilton, Mayme.
Harvey, Mary Winnifred.

I.

Ingoldsby, Annie Josephine.

J.

Jackson, Carrie B.
Jarrott, Wm. E.
Johnston, Christena M.
Johnson, Edna M.
Jackson, Gertrude.
Johns, Ella Jean.
Johnston, Helena.
Jones, Harriet Adelaide, (Honours).

K.

Kadey, Livey.
Kidd, Johnston. (Honours).
Kerr, Florence E.
Kelley, Leo Arnold.
Kyle, Mary.
Kaake, Isabella Margaret.
Kiteley, Helen Mary.
Kerr, Lillian Roberta. (Honours).
Kiteley, Jennie Maconohy. (Honours).
Kniseley, Clara E. (Honours).

L.

Lane, Josephine M.
Ludlow, May.
Lutes, George.
Larkin, Nellie.
Lawrence, Annie L.
Leggett, Hilda.
Long, Effie Green.
Laird, Opal Gertrude.
Langtry, Alberta Jane. (Honours).
Leggett, Clara Amelia.
Lee, Lulu Lorraine.
Limbert, Beatrice Jane.

M.

Magwood, Laura. (Honours).
Martin, Dulcie C. M.
Miller, Louise. (Honours).
Miller, May M.
Moran, Alicia.
Mitchell, Minnie. (Honours).
Maloney, Agnes Margaret.
Murphy, Clara M.
Magee, Hazel Arietta.
Mallory, Gertrude Evelyn.
Mann, Margaret McRae.
Martin, Anna Elizabeth.
Martin, Rose Louisa.
Maxwell, Alma.
Maxwell, Mima.
Meen, Eva C.
Meikle, Elizabeth.
Milburn, Ida Isabella.
Monsinger, Grace.
Moran, Agnes.
Morden, Pearl.
Morrow, Myrtle Janet.
Mowat, May. (Honours).
Munro, Winifred.
Matthews, Nellie. (Honours).
Morgan, Jessie.
Mangan, Mary Teresa.
Morrison, Janie F.

Mac.

MacArthur, Jennie.
MacDiarmid, Jennie R.
MacDonald, Ethel Ardeen.
MacGregor, Helen Marjorie.
MacLeod, Georgina Eliz. (Honours).
Mackintosh, Mary Eliz.
MacKenzie, Elizabeth.
MacNab, Nettie Catherine.

Mc.

McCallum, Josie.
McChesney, Nellie.
McGuigan, Maggie.
McKenzie, Maude.
McKillop, Maribel.
McLeod, Florence B.
McMaster, Maud H.
McNeil, Lina.
McNeil, Maggie.
McPherson, Mary Lena.
McCann, Phyllis.
McCloskey, Agnes. (Honours).
McCormick, Maud.
McDonald, Mary.
McFadden, May.
McPhee, Ethel Blanche.
McCallum, Florence B.
McDonough, Margaret.
McNevin, Leila. (Honours)
McNichol, Marjorie.
McQueen, Christina G.
McDiarmid, May.

N.

Nethercott, Olivia.
North, Emma C.
Nicholson, Elsie Irene.

O.

Oliver, Edith A.
Ouderkirk, Eva L.
Olhke, Clara Elizabeth.
Orr, Jessie Adeline.
O'Sullivan, Margaret.
O'Hara, John.
O'Brien, William.

P.

Pearson, Ellen E.
Pratt, Edith S.
Price, Clarence B.
Pelton, Effie L.
Poaps, Wm. B.
Patton, Edith A.
Pearson, Katharine May.

Pilcher, Celesta Alena.
Plews, Helen Marion.
Purser, Pearl Staples.

R.

Radford, Mrs. Edith.
Reavely, Chrystal.
Robertson, Amy M.
Robertson, Iva.
Russell, Jennie L.
Robb, Minnie Maggie.
Robbins, Nellie May.
Robinson, Helen Goodfellow.
Rodd, Emily.
Ricker, May Belle.
Ritter, Beatrice W.
Rogers, Laura Anna. (Honours).
Russell, Annie Maria. (Honours).

S.

Scott, Annie E.
Sellery, Nina.
Skelton, Gertrude E.
Smith, Marion.
Smith, McKinley Margaret.
Spence, Jennie Maud.
Swann, Eva Priscilla.
Shaw, Bessie Helena.
Seaton, Rosamonde.
Shaw, Ella Gertrude.
Shea, Geraldine E. M.
Smith, Jessie. (Honours).
Sanders, Rhoda.
Sawle, Isabella Eliz.
Scott, Eva Lavina.
Scott, Violet Adeline.
Scrimgeour, Susie B.
Sherman, Maude E.
Simpson, Ethel Louise.
Smillie, Marion.
Smith, Catherine.
Smith, May Ethel.
Smyth, Bessie Mary. (Honours).
Speirs, Winifred.
Stafford, Clara Forest.
Standen, Jean.
Stanners, Margaret Ellen.
Stevenson, Dell Amanda.
Suttaby, Nellie May.
Sims, Anna.
Salkeld, Jennie.

T.

Thomson, Cornelia.
Tate, Annie Rosena.
Thompson, Nancy Matilda.
Thrush, Nellie May.
Taylor, Tressa Mary.
Thompson, Hazel Clemo. (Honours).
Thomson, Catherine.

V.

Vickert, Blanche Orro. (Honours).

W.

Walker, Irene E.
Walkom, W. S.
Walsh, Margaret C. (Honours).
Webster, Eva M.
Wigle, Sylva.
Witting, Melinda.
Woodhouse, Lydia Ellen.
Watson, Nellie.
Williams, Annie.
Wilson, Mabel.
Wilson, Rosalind.
Wade, Maud.
Walker, Ethel Louisa.
Walsh, Ida May.
Ward, Bessie Lee.
Webb, Amy Laurel. (Honours).
Welton, Ada Mary.
Whan, Laura Alenia.
White, Margaret. (Honours).
White, Violet Maud.
Wight, Alberta May.
Wilson, Florence Helena.
Woods, Sarah Irene.
Wright, Minerva. (Honours).

Y.

Young, Wm. Frank.
Young, Helen Maud.
Young, Minnie.

7. *Kindergarten Directors.*

Asbury, Marion F.
Batton, Edna.
Clare, Lulu E. (Honours).
Dawson, Winnifred G. (Honours).
Dorrien, Noreen Mary. (Honours).
Duncan, Edna C.
Fisher, Alice M.
Fleming, Margaret L.
Harrison, Elizabeth. (Honours).
Hogg, Roberta.
Kilbourn, Sara M.
Lalor, Teresa Mary.
Macpherson, Edith.
Main, Rae Beatrice.
Newcombe, Helen. (Honours).
Norris, Evelyn Gertrude. (Honours).
Rankin, Myra Christina. (Honours).
Robertson, Florence M.
Robinson, Effie.
Roesler, Teresa.
Shakleton, Mary D.
Spencer, Sarah. (Honours).
Wood, Minnie Leona.
Wrenshall, Mabel.

8. *Certificates in Household Science.*

Allan, Mary Evelyn. (Specialist).
Armstrong, Jean.
Burns, Edna Muriel. (Specialist).
Booth, Edna.
Calder, Elizabeth.
Campbell, Mina.
Carlyle, Nellie Gray.
Dutcher, Grace.
Elliott, Clara Evelyn.
Edwards, Alice Mildred.
Fairlie, Mrs. Annie E.
Graham, Helen Seymour.
Grange, Gladys Chelyn.
Hamilton, Alison.
King, Edna Clarke.
Keagey, Margaret Drummond.
Maclennan, Kate P.
Muldrew, Mrs. Jennie.
Parkin, Mabel Luella.
Pattinson, Nellie Kyle. (Specialist).
Pave, Helen Adelaide.
Pickett, Eva Leona.
Ross, Jessie Dolsen.
Snell, Luella Elizabeth.
Stewart, Mary McIntyre.
Steinhoff, Ethel M.
Twiss, Fannie A. (Specialist).
Wright, Edith M.

9. *Certificates in Manual Training.*

Burchill, John. (Specialist).
Cunningham, James Henry. (Specialist).
Faw, Edward. (Specialist).
Painter, Arthur Jefferson.
Scarrow, Allen Nelson. (Specialist).
Shortill, Robert Nickell.

10. *Permanent Third-Class and Public School Temporary Certificates.*

	Permanent third-class certificates.		Temporary certificates.		
	Provincial.	Limited to the county, district or city.	No. of Teachers who received certificates.	No. who received two certificates.	No. who received three certificates.
Bruce	2		7		
Carleton			22	4	1
Dufferin			11	1	
Dundas		1	1		
Essex			8		
Frontenac	1		2		
Glengarry	2		5	2	
Grey			4		
Hastings	1		41	6	1
Kent			2		
Lanark	1		25	2	
Leeds and Grenville	2	1	14	1	
Lennox and Addington	1		11	3	
Lincoln			1		
Norfolk			2		
Northumberland			1		
Ontario			1		
Oxford			1		
Peel			1		
Peterborough			17	1	
Prescott and Russell		2	10	1	
Prince Edward			3		
Renfrew	1	2	35	16	
Simcoe	1		10		
Stormont			6		
Victoria	1		17	2	
Wentworth		2			
Districts	4	2	180	38	
Hamilton	1	2			
Separate and Bilingual Schools	2	2	36		
Total	20	14	474	77	2

11. *Professional Examinations.*

Examinations.	Number of Candidates.	Certificates Awarded.					
		First Class.	Second Class.	High School Interim.	Public School Interim.	Kindergarten Directors.	Kindergarten Assistants.
Normal College	251	72		164	146		
Normal School	356		308		47		
Kindergarten	*					24	30

*Not reported.

APPENDIX X.—MEMBERS OF THE ADVISORY COUNCIL, AND BOARD OF EXAMINERS; LISTS OF ASSOCIATE EXAMINERS, AND HIGH SCHOOL PRINCIPALS AND ASSISTANTS.

I. Members of the Advisory Council.

John Seath, LL.D., Superintendent of Education for Ontario, Toronto.
Rev. R. A. Falconer, LL.D., President, University of Toronto.
Maurice Hutton, LL.D., Principal, University College, Toronto.
Rev. N. Burwash, LL.D., President, Victoria College, Toronto.
Rev. T. C. S. Macklem, Provost, Trinity College, Toronto.
A. P. Knight, M.A., M.D., Queen's University, Kingston.
A. C. McKay, LL.D., Chancellor, McMaster University, Toronto.
Rev. W. J. Murphy, Rector, Ottawa University, Ottawa.
N. C. James, Ph.D., Provost, Western University, London.
Thos. A. Kirkconnell, B.A., Principal, High School, Port Hope.
Stephen Martin, B.A., Principal, Collegiate Institute, St. Mary's.
Harriette Johnston, Public School Teacher, Toronto.
Alex. Austin Jordan, Principal, Central School, Kingston.
J. W. Plewes, Principal, Model School, Chatham.
Thos. Agnew Reid, Principal, Model School, Owen Sound.
John J. Rogers, Principal, Separate School, Lindsay.
Wm. I. Chisholm, M.A., Inspector Public Schools, Kincardine.
Rev. W. H. G. Colles, Inspector Public Schools, Chatham.
J. Ball Dow, School Trustee, Whitby.
John H. Laughton, School Trustee, Parkhill.

II. Board of Examiners, 1908.

University Matriculation.

A. R. Bain, M.A., LL.D., Victoria College, Toronto.
W. S. W. McLay, M.A., McMaster University, Toronto.
M. W. Wallace, Ph. D., University College, Toronto.
W. Findlay, Ph. D., McMaster University, Toronto.

II. Board of Examiners, 1908.—*Continued.*

J. Matheson, M.A., Queen's University, Kingston.
A. T. DeLury, M.A., University of Toronto.
C. A. Chant, M.A., Ph. D., University of Toronto.
F. B. Kenrick, M.A., Ph. D., University of Toronto.
W. H. Piersol, B.A., M.B., University of Toronto
J. W. G. Andras, Ph. D., Trinity College, Toronto.
J. N. Dales, M.A., McMaster University, Toronto.
L. E. Horning, Ph. D., Victoria College, Toronto.
W. H. Alexander, Ph. D., Western University, London.
G. W. Johnston, B.A., Ph. D., University of Toronto.
G. W. Mitchell, M.A., Queen's University, Kingston.

III. Associate Examiners for Departmental Examinations, 1907.

District Certificate.

Dictation:
Kerfoot, H. W.

Grammar:
Magee, J. A.

Arithmetic:
Froats, J.

Composition:
Bernath, A. C.

Algebra:
Merritt, A. A.

Literature:
Dunsmore, Thos.
Cameron, C.

Geometry:
Leighton, R. H.

Geography:
Miller, G. A.

History:
Burchill, A. M.

Junior Teachers.

Composition:
Paterson, D. S.
French, F. W.
Horton, Chas. W.
Somerville, T. C.
Sealey, Ethel M.
Sexsmith, W. N.
Evans, E. W.
Clyde, W. W.

History:
Paterson, Andrew.
Dowsley, W. C.
Jermyn, P. T.
Mabee, Geo. E.
Dickenson, E. U.
Jennings, E. W.
Milburn, E. F.
Dolan, Geo. R.
May, Annie.
Morris, A. W.
Ferguson, G. A.

JUNIOR TEACHERS.—*Continued.*

Geometry:
Henry, Thos. M.
Taylor, J. G.
Hills, Minnie.
Armstrong, G. F.
Hobbs, Thos.
Saunders, W. R.
Andrews, David.
Rutherford, W. H.
Taylor, Wilson.
Minns, J. E.

Grammar:
Kennedy, L. A.
McCuaig, H. M.
Pattee, Mrs. Ada.
Watson, A. H.
Newman, Geo. E.
Morrison, A. S.
Phillips, W. A.
Gilchrist, D. A.
Teskey, Cath.
Clayton, Miss A. H.

Arithmetic:
Potter, Chas.
Wren, J. S.
Davidson, John H.
Doidge, T. C.
Norris, Jas.
Shaw, R.
Kelly, H. H.

Geography:
Emery, J. W.
Kennedy, Geo. E.
Might, L.
Shepherd, M. W.
Saunders, W. J.
Ewing, W. C.
Williams, L. J.
Fetterley, H. B.
Brunt, R. A.
Graham, R. R.

Chemistry:
Gundry, A. P.
Closs, F. D.
Wilson, W. J.
Corkill, E. J.
Preston, Thos.
Smith, T. C.
McKay, D. A.
Grainger, H. A.
Robertson, G. A.

Literature:
Stevenson, A.
Bennett, Maud.
Fleming, Ethel M.
Mowat, A.
Dickson, J. E.
Cole, Miss A. S.
Martyn, H. G.
Skeele, J. A.
Cameron, A.
McGarvin, M. J.
Watson, E.
Bibby, Maria.
McPherson, W. E.

Algebra:
Patterson, W. J.
Lick, Addie.
Crawford, J. T.
Sprung, W. L.
Davidson, Hugh.

Physics:
Gavin, F. P.
Moore, J. R.
Arthur, C. C.
Saunders, Charlotte.
Madill, A. J.
Conn, H.
Langford, T. E.
Cole, J. M.
Bigg, E. M.
Cornish, G. A.

JUNIOR MATRICULATION.

Literature:
Coombs, A. E.
MacPherson, F. F.
Reed, Geo. H.
Brethour, J. H.
Shields, A. M.

Grammar:
Morgan, S. A.
Story, Selina G.
Dickey, Miss M. A.
MacLachlan, Cath.
Keefe, R. D.

Geometry:
Dickson, J. D.
Richardson, Kate.
Cranston, D. L.
Halnan, L. R.
Simpson, E. E.
Wood, E. E.

Composition:
Stevenson, O. J.
Nesbit, David A.
Guillet, Cephas.
Archer, Mary.
Amos, Flora.

Algebra:
Snider, E. E.
Kennedy, Thos.
Brown, C. L.
Delmage, Edith.
Simpson, B. L.

Physics:
Stevenson, Louis.
Scratch, Linnie.

History:
Barnes, Chas. L.
Kent, Eleanor.
Findlay, W. A.
Gibson, Ethel.
Doherty, Mabel.
Wegg, Miss C.
Glass, W. A.
Tate, E. Mabel.

Arithmetic:
Coates, D. H.
Girdwood, A. R.
Lawlor, R. G.

Chemistry:
Lennox, T. H.
Forrest, Wm.

French and German:
Galbraith, W.
Grant, Christina C.
Reid, Robt.
Clarke, M. S.
Francis, Annie B.
Odlum, Eleanor.
Ewing, Florence.
Houston, Jessie.
Conlin, Evelyn.
Williams, W. H.
Ward, Clara.
Pilkey, P. J.

Classics:
Mayberry, Chas.
Messmore, J. F.
Anderson, W. G.
Andrews, R. T.
Howell, W. B. L.
Cameron, A. R.
Kirkwood, Miss F. E.
Kerr, Chas. S.
Munro, P. F.
Morrow, J. D.
Gundry, Helen M.
McDonald, R. A. F.
Mooney, W. H.
Cook, J. A.
Race, W. B.
Tremeer, J.
Macdonald, John F.
Trench, W. W. A.
Bellamy, W.
Coutts, R. D.
McDonald, J.

SENIOR TEACHERS AND HONOUR MATRICULATION.

English:
Levan, I. M.
Perry, Sam. W.
Skinner, Kate.
Thompson, Miss M. J.
McKim, W. A.
Field, J. M.

French and German:
Ferguson, W. C.
McKellar, H. S.
Bunnell, Effie.
Willson, Alice.
MacLean, A. E.
Macdonald, G. L.

History:
Carscadden, Thos.
Keiller, Jas.
Elmslie, W.
Kenner, H. R. H.
Ross, Ralph.

Classics:
Hodgson, J. E.
Little, Robt. A.
Colling, Jas.
Harding, W.
Brown, L.
Treleaven, J. W.

Mathematics:
Elliott, John.
Govenlock, W. M.
Odell, J. W.
Harstone, J. C.
Birchard, I. J.
Slemon, E. T.

Science:
Ellis, W. S.
Smith, R. Wilson.
Turner, J. B.
McGuire, J. T.
Nicol, W.
Anderson, G. R.
Staples, L. E.
Stuart, F. A.
Smith, J. H.

IV.—List of Principals and Assistants of Collegiate Institutes and High Schools, January, 1908.

Collegiate Institutes.	Names of Teachers.	Degrees.	Specialties.	Date of appointment.	No. of years' experience in a High School or Collegiate Institute.	No. of years in a Public School.	Salary.		
							Principal.	Male Assistants.	Female Assistants.
Aylmer	Rutherford, Walter W.	B.A., Tor	Math	1883	31	1	$1,500		
	Kilmer, Ernest E. C.	B.A., Queen's	Commercial Sci	1899	17	3		$1,200	
	Story, Selina Gladys	M.A., Queen's	Mods. and Hist.	1904	5				$1,000
	Gundry, Helen Myrtle	B.A., Tor.	Class	1906	4	1			800
Barrie	Redditt, Thomas H.	B.A., Tor.	Eng., Fr., Ger	1893	26		1,600		
	Hay, Andrew		Math.	1882	29	8		1,150	
	Morrison, Alexander Selkirk	B.A., Queen's	Eng. Hist	1905	5	4		1,100	
	Mackay, Donald Alex	B.A., Queen's	Science	1905	7	5		1,100	
	White, Kate Elizabeth		Com. (Interim)	1907	3	1			850
	May, Annie (Interim)	B.A., Tor.	Class	1907	2½	1½			1,100
Berlin	Forsyth, David	B.A., Tor.	Math	1901	31⅜	1	1,850		
	Jackman, David S.	M.A., Tor	Science	1902	6½	3		1,400	
	Dolan, George Robert	B.A., Queen's	Eng., Hist., Class	1903	6½			1,300	
	Norman, Lambert	B.A., Tor.	Com., Eng., Hist., Fr., Ger.	1904	13	3		1,300	
	Martyn, Harold J.	B.A., Tor.	Mods. and Hist.	1904	5½	3		1,200	
	Williams, Walter Herbert	M.A., Queen's	Mods. and Hist.	1905	3½	2		1,200	
	Brown, Harry Wilson			1905	2½	17		1,000	
	Houston, Daniel Wesley		(Manual Training Instr.)	1903	4½	18		1,300	
	Fisher, Katherine A.		(Household Science Instr.)	1903	4½				750
	Zoellner, M. Margaret		(Physical Director)	1905	3				450
Brantford	Burt, Arthur William	B.A., Tor.	Mods. and Eng.	1893	30		1,900		
	Passmore, Samuel Francis	M.A., Tor.	Class	1885	29			1,350	
	Coates, Daniel Harsum	B.A., Tor	Math	1893	21			1,350	
	Bunnell, Effie Maria	B.A., Tor.	Eng., Fr., Ger.	1891	17				1,350
	Shultis, Adam		Commercial	1896	13	11		1,300	
	Saunders, William John	M.A., Queen's	Science	1907	7½	3		1,250	

	Sheppard, Martin Ward	B.A., Tor		1907	6	9		1,100	
	Odell, Lena (Interim)	B.A., Queen's		1907	½				700
	*Errett, Charles F.		(Manual Training Instr.)	1902	6	2		1,200	
	*Pattinson, Nellie Kyle		(Household Science Instr.)	1908	5				600
Brockville	Husband, Almeron J	B.A., Tor	Eng., Hist. (Interim) Fr., Ger.	1895	12	3	1,600		
	Forbes, John William	B.A., Tor	Math	1902	10	3		1,200	
	Dowsley, William Clinton	M.A., Queen's	Class., Eng., Hist	1907	8	4		1,200	
	McGuire, James F.	M.A., Queen's	Science	1907	4	10		1,200	
	McCormack, Samuel G.	M.A., Queen's		1907	2			1,200	
	Giles, A. Edith			1890	18	3			800
	Richardson, Kate		Commercial	1898	11	6			800
	McCormack, Mary Irene (Interim)	B.A., Queen's		1907		2			700
Chatham	Twohey, William James	M.A., Tor	Class	1904	23		1,700		
	Paterson, David Smith	B.A., Tor	Eng., Fr., Ger	1888	31	1½		1,300	
	Taylor, Wilson	B.A., Tor	Math	1894	22	2½		1,300	
	Ayers, Marion Huntley	M.A., Queen's	Science	1905	3½	8		1,250	
	Wethey, Edmund James (Interim)	B.A., Trin	Math	1906	2½	5½		1,000	
	Kidd, Truman W			1906	2½	6		1,000	
	Edward, Frankland Ward		Commercial (Interim)	1907	2½			1,250	
	Sexsmith, William Newton	B.A., Tor		1907	3½	3		1,000	
	Steele, Flora Elizabeth (Interim)	B.A., Tor	Mods. and Hist.	1907	2				1,200
	Barker, George Albert (Interim)			1907		11		1,000	
Clinton	Gundry, Arthur Presland	B.A., Tor	Science	1906	16½		1,400		
	Treleaven, John Wesley	B.A., Tor	Class	1907	16			1,100	
	Delmage, Edith Rachel	B.A., McMaster	Math	1906	3	4			900
	Ball, Emerson E. (Interim)	B.A., Tor	Mods. and Hist.	1907	½			900	
	Moir, Isabella (Interim)		Commercial	1907	½	8			800
Cobourg	Colling, James	B.A., Tor	Class	1906	16	3	1,400		
	Arthur, Colin Clayton	M.A., Queen's	Science	1893	15	1		1,150	
	Odell, John William	B.A., Tor	Math	1895	15	3		1,150	
	Jones, Laura Lucinda	B.A., Tor	Eng., Fr., Ger.	1898	15				900
	Clayton, Vivian E. (Interim)	B.A., Manitoba	Com.	1907	1½			950	
Collingwood	Brown, Percy William	B.A., Queen's	Science	1906	14	4	1,200		
	Henderson, James Vanwyck	B.A., Tor	Class	1906	4½	3		1,100	
	Fairchild, Austin H.	B.A., McMaster	Math	1907	3½	5		1,000	
	Libby, Minnie Fennessey	B.A., Victoria	Eng., Hist., Fr., Ger.	1907	11	4			900
	Smith, Margaret		Commercial (Interim)	1907	13	3			900
	Day, John Wilfrid (Interim)			1907	½	13		900	
	Mortimer, R. E.	B.S.A.	(Agriculture Instructor)	1907				1,200	

* Partly engaged in Public School work.

IV. List of Principals and Assistants of Collegiate Institutes and High Schools, January, 1908.—*Continued.*

Collegiate Institutes.	Names of Teachers.	Degrees.	Specialists.	Date of appointment.	No. of years' experience in a High School or Collegiate Institute.	No. of years in a Public School.	Salary.		
							Principal.	Male Assistants.	Female Assistants.
Galt	Carscadden, Thomas	M.A., Tor.	Eng., Hist	1885	34	3	$1,800	.....	.....
	DeGuerre, Ambrose	B.A., Tor.	Math	1890	18	....	.....	$1,300	.....
	Evans, William Edwin	.....	Commercial	1892	18	4	.....	1,300	.....
	Hamilton, Robert Somerville	B.A., Tor.	Science	1894	18	....	.....	1,300	.....
	Carter, Janet Wishart	M.A., Tor.	Eng., Hist. (Inter.), Fr., Ger.	1901	15	....	.....	.....	$1,050
	Morrow, Archibald Elston	B.A., Tor.	Class	1905	18	....	.....	1,300	.....
	Bissonnette, Thos. Hume .(Interim)	.....	.....	1906	1	1	.....	900	.....
	Gilmore, Allan.....(Interim)	.....	.....	1908	.....	6	.....	800	.....
	Yeo, Charles Timothy	.....	(Manual Training Instr.)	1907	.....	....	.....	1,000	.....
	Twiss, Fannie Adelia .....(Interim)	.....	(Household Science Instr.)	1907	.....	....	.....	.....	700
	Hart, Frank Cyril	B.S.A.	(Agriculture Instructor)	1907	.....	....	.....	1,200	.....
Goderich	Field, John Marden	B.A., Tor.	Eng., Hist., Fr., Ger.	1900	12	7½	1,500	.....	.....
	Strang, Hugh Innis	B.A., LL.D., Tor.	Class	1871	40	3	.....	1,200	....
	Robertson, George A.	B.A., Tor.	Science	1905	3½	5	.....	1,100	.....
	Delmage, Evelyn E.	B.A., McMaster	Math	1907	5	....	.....	.....	1,100
	Doherty, Mabel	.....	Commercial	1908	4½	3	.....	.....	900
Guelph	Davison, James	B.A., Vic.	Math	1892	34	2	1,600	.....	.....
	Emery, John W.	B.A., Tor.	Com. (Interim), Science	1907	10½	3½	.....	1,450	.....
	Skinner, Kate Clara	B.A., Tor.	Eng., Hist., Fr., Ger.	1895	13	1	.....	.....	1,000
	Kirkwood, Florence Ethel	B.A., Tor.	Class	1907	8	....	.....	.....	1,200
	Charlesworth, John William	.....	.....	1888	20	3½	.....	1,150	.....
	Taylor, Luther William	.....	Commercial	1902	8	1½	.....	1,250	.....
	Hughes, Francis Joseph	B.A., Queen's	Commercial	1904	3	....	.....	1,050	.....
	Overholt, B. Percy .....(Interim)	.....	.....	1907	1	4	.....	900	.....
Hamilton	Thompson, Robert Allan	B.A., Tor.	Math	1886	22	....	2,500	.....	.....
	Turner, John Burgess	B.A., Queen's	Math., Science	1885	26	3½	.....	1,900	.....

	Crawford, John Thomas	B.A., Tor	Math	1889	20	..	.....	1,700	.....	
	Logan, William McGregor	M.A., Tor	Class	1892	22	....	.....	1,700	.....	
	Hogarth, Eber Septimus	B.A., Tor	Eng., Fr., Ger	1892	19	...	.....	1,700	.....	
	MacPherson, Fred. Fotheringham	B.A., Tor	Eng., Fr., Ger	1894	15½	2	.....	1,700	.....	
	Paterson, Andrew	M.A., Trin	.....	1874	33	3	.....	1,500	.....	
	Gill, James	B.A., B. Ped., Tor	Math	1892	18	2	.....	1,500	.....	
	Simpson, Benjamin L. ....(Interim)	M.A., Queen's	Math	1904	3½	3	.....	1,200	.....	
	Johnston, George Lang	B.A., Queen's	Commercial	1888	20	3	.....	1,200	....	
	McGarvin, Michael James (Interim)	B.A., Tor	Mods. and Hist	1906	2½	2	.....	1,200	.....	
	Morris, Arthur Whitman ..(Interim)	M.A., Tor	Class	1906	3½	5	.....	1,200	.....	
	Armstrong, Geo. Francis	B.A.. Tor	Math	1907	5½	1½	.....	1,200	.....	
	Morrison, Edward .....(Interim)	B.A., Tor	Science	1907	1½	6	.....	1,000	.....	
	Taylor, Mabel Annie	B.A., Queen's	.....	1904	4	5	.....	.....	800	
	Kraft, Ernestine Lizette	.....	.....	1904	3½	2	.....	.....	700	
	Davidson, Margaret Cheyne	.....	.....	1876	32	14	.....	.....	500	
	Macpherson, Mary Constance	B.A., Queen's	(Household Science Instr.)	1903	4½	4½	.....	.....	750	
	Bailey, William	.....	(Manual Training Instr.)	1907	4	13	.....	1,000	.....	
	Syme, John James	.....	(Drill Instructor)	1905	2½	....	.....	.....	.....	
Ingersoll	Briden, William	B.A., Queen's	Class., Eng.	1886	27½	½	1,400	.....	.....	
	Cameron, John Shaw	.....	Math	1898	12	1	.....	1,100	.....	
	Staples, Louis Edgar	M.A., Queen's	Science	1908	5½	15	.....	1,200	.....	
	Baker, Albert Henry.....(Interim)	B.A., Bishop's Coll	.....	1907	½	6	.....	750	.....	
	Lucas, Gavin Allan	B.A., Tor	Commercial.....(Interim)	1904	5	6	.....	1,000	.....	
	Francis, Annie Buchan	B.A., Tor	Mods. and Hist.	1908	5	1	.....	.....	1,000	
Kingston	Ellis, William Stewart	B.A., B.Sc., Vic	Math., Science	1893	27	2	1,900	....	.....	
	Sliter, Ernest Oscar	M.A., Tor	Class	1888	19	...	.....	1,300	.....	
	Sills, William Ryerson	M.A., Queen's	Math	1897	15	3	.....	1,300	.....	
	Bale, George Sidney	B.A., Tor	Eng., Hist., Fr., Ger	1906	6	...	.....	1,150	.....	
	Stevenson, Andrew	B.A., Tor	Eng. and Hist	1908	23	2¾	.....	1,150	.....	
	Fraser, James Williams	B.A., Tor	.....	1904	3½	10	.. ..	1,000	.....	
	Ramsay, James Alex	.....	Com.....(Interim)	1906	3½	6	.....	1,000	.....	
	Saunders, William John	M.A., Queen's	Science	1908	7½	3	.....	1,000	.....	
	Stoddart, Robert	B.A., Tor	Class	1908	12	¼	.....	1,000	.....	
	Hedley, William Powell	B.A., Tor	Math	1908	3½	8	.....	1,000	.....	
	Chown, Hattie Louise	.....	.....	1905	2	20	.....	.....	800	
	Henstridge, Elizabeth	M.A., Queen's	Eng., Hist., Fr., Ger	1907	6½	7	.....	.....	850	
	Hatch, Augustus F	B.A., Bowdoin	(Manual Training Instructor)	1903	4½	....	.....	1,100	.....	
Lindsay	Harstone, John C	B.A., Tor	Math	1886	28	....	1,600	.....	.....	
	Cornish, George Augustus	B.A., Tor	Science	1903	5	3½	.....	1,300	.....	
	Rosevear, Howard Stanley	B.A., Tor., M.A., Har.	Com. (Interim), Sci	1903	12	...	.....	1,300	.....	
	Cowles, John P. .....(Interim)	B.A., Queen's	.....	1907	½	5½	.....	1,000	.....	
	Walks, Robert Hilton	B.A., Tor	Eng., Hist	1904	11	6	.....	1,250	.....	

IV. List of Principals and Assistants of Collegiate Institutes and High Schools, January, 1908.—*Continued.*

Collegiate Institutes.	Names of Teachers.	Degrees.	Specialists.	Date of appointment.	No. of years' experience in a High School or Collegiate Institute.	No. of years in a Public School.	Salary.		
							Principal.	Male Assistants.	Female Assistants.
Lindsay—*Con.*	Morrish, Celia Winnifred	B.A., Tor	Mods. and Hist	1907	2½	....	.....	.....	$1,000
	Dunkley, Albert Wesley	M.A., Queen's	Class	1908	7½	....	.....	$1,200	.....
	Reed, Francis H	B.S.A., Tor	(Agriculture Instructor)	1907	.....	....	.....	1,200	.....
London	McCutcheon, Fred. Wm. Caswell	B.A., Tor	Fr. and Ger. (Interim), Math., Eng. and Hist	1900	10½	....	$2,000	.....	.....
	Little, Robert A.	B.A., Tor	Class	1886	23½	....	.....	1,800	.....
	McVicar, Archibald	B.A., Tor	Eng. Hist	1903	10½	4½	.....	1,600	.....
	Stuart, Frederick Alfred	M.A., Tor	Science	1903	13½	....	.....	1,500	.....
	Gray, Neil Roy	B.A., Tor	Mods and Hist (Interim)	1904	4	3	.....	1,500	.....
	Overholt, Arthur Milton	M.A., McMaster	Math.	1908	8	½	.....	1,500	.....
	Lane, James Stanley	B.A., Tor	Fr. Ger.	1908	11	....	.....	1,500	.....
	Riddell, Frank P	B.A., Tor	Class	1898	18	....	.....	1,400	.....
	Andrus, Guy Ambrose	.....	.....	1888	23	7½	.....	1,500	.....
	Dickenson, James Arthur	.....	Commercial	1895	21	4	.....	1,500	.....
	Mooney, Wm. H. Thos	B.A., Tor	Class (Interim)	1903	6	5½	.....	1,400	.....
	Grainger, Horace Alex	B.A., Tor	Sci	1906	5½	....	.....	1,400	.....
	Jones, Samuel S	.....	.....	1892	17	6	.....	1,400	.....
	Downing, John Henry	.....	.....	1900	8	8	.....	1,400	.....
	Buchanan, John Alexander	.....	Commercial	1907	6	3	.....	1,400	.....
	McDonald, Geo. Leslie	B.A., Tor	Eng., Fr., Ger	1908	15	7	.....	1,400	.....
	Taylor, John Gladstone	B.A., Tor	Math	1908	10½	....	.....	1,400	.....
	Anderson, Jessie Inglis	B.A., Tor	Mods. and Hist	1906	2½	....	.....	.....	1,000
	Kelso, Alice C	.....	.....	1897	12½	2½	.....	.....	1,000
	Davidson, S. Kelso	.....	(Art Instructor)	1887	20	6	.....	750	.....
	McIntosh, Christine	.....	(Household Science Instr.)	1905	3	....	.....	.....	500
	Gregory, William	.....	(Drill Instructor)	1902	6	....	.....	.....	.....
Morrisburg	Jamieson, James Smyth	M.A., Vic	Eng	1882	32	4	1,400	.....	.....
	Massey, Arthur Wallace	B.A., Vic	Eng., Math	1892	17	....	.....	1,100	...
	Cooke, John Alexander	M.A., Queen's	Class	1904	18½	3	.....	1,100	.....

	Amos, Flora Ross	B.A., Tor.	Mods. and Hist.	1906	3½			850
	Jamieson, Clinton Egerton		Com.	1906	3½	1	900	
	Boyd, Annie Alicia	M.A., Queen's	Com. (Interim), Science	1907	3½	8		1,000
	Munro, William A	B.A., Q.'s, B.S.A., Tor.	(Agriculture Instructor)	1907			1,200	
Napanee	Flach, Ulysses Jacob	M.A., Tor.	Math	1900	19		1,600	
	Croskery, Robert Arthur	B.A., Queen's	Class	1903	11		1,200	
	Smith, Thomas Corlett	B.A., Queen's	Science (Interim)	1907	8	14	1,200	
	Collins, Herbert Eugene (Interim)	B.A., Tor.	Mods. and Hist.	1907	2		1,000	
	Nicol, Margaret A			1892	15½	5		700
	Mitchell, Jessie A	B.A., Tor.		1907	12	9		600
Niagara Falls	Dickson, James D	B.A., Tor.	Math	1893	20	3	1,700	
	Walker, David McKenzie		Com.	1893	18	16	1,300	
	Will, George Edwin	B.A., Tor.	Class	1901	8	3	1,300	
	Conlin, Evelyn Elizabeth	B.A., Tor.	Mods. and Hist.	1906	6			1,200
	Logan, Jessie M (Interim)	B.A., Queen's	Mods. and Hist.	1907	½			1,000
	Pearson, Alexander	B.A., Tor.		1908	14½		1,300	
	Wait, Smith Austin (Interim)			1907	½	3	900	
Orillia	Dickson, John Elder	B.A., Tor.	Class., Eng.	1899	28	1	1,500	
	Doidge, Thomas Clarke	B.A., Tor.	Math., Com.	1899	14	5	1,200	
	Madill, Alonzo James	B.A., McMaster	Science	1905	6	3½	1,000	
	Ogilvie, Alvin Irwin			1906	3		800	
	Miller, Nannie M. A		Com., Eng.	1905	14	1		900
	Grant, Christina Cameron	B.A., Tor.	Mods. and Hist.	1903	5½	9		850
	Clark, Ira E (Interim)			1906	1½	8	750	
Ottawa	McDougall, Alexander Hiram	B.A., Tor.	Math	1889	24		2,600	
	Macmillan, John	B.A., Tor.	Eng	1864	43	5	2,000	
	Sykes, William John	B.A., Tor.	Eng., Fr., Ger.	1894	16	3	1,900	
	Campbell, Daniel Alexander	B.A., Tor.	Science	1896	11	3	1,875	
	Marty, Aletta Elsie	M.A., Queen's	Fr., Ger.	1903	13	3		1,600
	Norris, Isaac Taylor	B.A., Queen's	Math	1898	12		1,600	
	Hardie, William	B.A., Tor.	Class	1905	16		1,600	
	Stothers, Robert	B.A., Queen's		1887	21	8	1,700	
	Simpson, Robert S		Com.	1903	9	9	1,300	
	Meiklejohn, Allan James	B.A., Queen's	Eng. Hist.	1906	9	3	1,400	
	Armstrong, W. Gilnochie	M.A., Tor.	Mods. and Hist.	1900	13	4	1,250	
	Ewing, William Campbell	M.A., Queen's	Science	1905	11	4	1,200	
	Hedley, James Walter	M.A., Tor.	Math	1904	5	2	1,200	
	Smeaton, William	B.A., Tor.	Science	1906	7½	1½	1,200	
	Stevenson, Wm. John			1906	17	8	1,200	
	Tompkins, Elizabeth Augusta			1902	5½	19		950
	McManus, Emily	M.A., Queen's	Eng. Hist.	1906	12	3½		950

IV.—List of Principals and Assistants of Collegiate Institutes and High Schools, January, 1908.—*Continued.*

Collegiate Institutes.	Names of Teachers.	Degrees.	Specialists.	Date of appointment.	Number of years' experience in a High School or Collegiate Institute.	Number of years in a Public School.	Salary.		
							Principal.	Male Assistants.	Female Assistants.
Ottawa.—*Con.*...	Hood, Finlay		Com., Art.....(Interim)	1906	3	7	.....	$1,100	.....
	Keogh, Lucius Richard....(Interim)			1907	1½	8½	.....	1,000	.....
	Mann, Harry Clarke.....(Interim)	B.A., McMaster		1907	½	6	.....	1,000	.....
	*Chitty, Louis M. (Sergt.-Major)	....	(Drill Instructor)	1904	.....	....	.....	.....	.....
Owen Sound....	Murray, Thomas	B. A., Tor	Math	1897	14	....	$1,900	.....	.....
	Packham, James Henry	B. A., Vic	Math., Commercial	1884	24	2	.....	1,400	.....
	McKellar, Herbert S	B. A., Tor	Fr., Ger	1898	13½	...	.....	1,400	.....
	Whyte, David	B. A., Tor	Science	1902	9	3	.....	1,400	.....
	Brown, Lyman	M. A., Tor	Class	1903	11	1½	.....	1,400	.....
	VanEvery, John Fair	B. A., Tor	Eng., Hist., Fr., Ger	1903	10	....	.....	1,400	.....
	Day, Alfred E	M. A., Queen's	Eng., Hist., Fr., Ger	1907	9½	....	.....	1,100	.....
	Dowkes, William J	.....	.....	1903	4	12	.....	900	.....
	Asselstine, Oliver.....(Interim)	M. A., Queen's	Math	1907	½	....	.....	900	.....
	Bell, James Stewart.....(Interim)	.....	.....	1908	1½	2	.....	850	.....
	Pritchard, Frances Palmer	.....	(Household Science Instr.)	1907	1	5	.....	.....	$600
	Scarrow, Allen N	.....	(Manual Training Instr.)	1908	.....	15½	.....	1,000	.....
Perth.....	McKim, William Andrew	B. A., Tor	Eng., Hist., Fr., Ger	1900	10½	3	1,450	.....	.....
	Fergusson, George Arthur	B. A., Tor	Class	1905	4½	2	.....	1,200	.....
	Preston, Thomas	B. A., Tor	Science	1903	13	2	.....	950	.....
	Edmiston, James A	....	.....	1893	14½	8	.....	900	.....
	Frost, Francis Henry	B. A., Tor	Math	1906	13	2	.....	1,200	.....
	Hamer, Roy S	B. S. A., Tor	(Agriculture Instructor)	1907	½	2	.....	1,200	.....
Peterborough....	Fessenden, Cortez	M. A , Trin	Math	1890	32	3	2,000	.....	.....
	Kenner, Henry Rowe H	B. A., Tor	Class	1893	19	½	.....	1,460	.....
	Srigley, Edgar Cooper	.....	Commercial	1902	13	5½	.....	1,170	.....
	Hodgson, Joseph Emerson	B. A., Tor	Science.....(Interim)	1905	5½	4½	.....	1,270	.....

	Weir, Annie	B. A., Tor	Eng., Hist., Fr., Ger	1904	11	6			1,260
	Merritt, Robert Norris	B. A., Tor	Math	1906	8	1½		1,260	
	Bauer, Bertha Theresa....(Interim)	B. A., Tor		1906	2	2			850
	Stubbs, Samuel James	B. A., Tor	Eng., Hist., Class	1907	11	3		1,260	
	Harvey, John Franklyn ..(Interim)	B. A., Queen's		1907	½	9		1,000	
Renfrew	McDowell, Charles	B.A., Queen's	Math	1879	30	5	1,300		
	Bryan, Hugh Wallace	M.A., Queen's	Class	1907	10⅔			1,250	
	McMillan, George....(Interim)	M.A., Queen's	Sci	1907	2	½		1,000	
	Windsor, Annie....(Interim)	B.A., McMaster	Math	1907	1½				750
	Wilkie, Marion Florence..(Interim)	B.A., Tor	Fr., Ger	1907	2½				750
	Ressor, Lillian M		Commercial	1904	4½				800
	Burns, Edna M		(Household Science Instr.)	1907	½	3			650
Ridgetown	Little, John George	B.A., Tor	Math	1889	21	½	1,400		
	Marshall, Charles Frederick(Interim)	B.A., Tor	Science	1907	½			900	
	Fleming, Maude E	M.A., Queen's	Mods. and Hist	1906	2½				800
	Watterworth, Grace M		Commercial	1907	7½	2			750
	Fletcher, Beatrice Louisa..(Interim)	B.A., Tor	Class	1907	½	2			700
St. Catharines	Henderson, John	M.A., Tor	Class., Eng., His	1872	36	5	1,750		
	Robertson, William John	B.A., Tor., LL.B., Vic.	Math	1874	34			1,350	
	Conn, Henry	B.A., Tor	Science	1906	12	3		1,200	
	Cloney, Sarah Louise	M.A., Queen's	Eng., Hist., Fr., Ger	1896	17	5			1,150
	Cooper, Alexander B.....(Interim)	B.A., Queen's	Commercial	1906	2	12		950	
	Caverhill, Arthur E			1894	15	15		950	
	Odlum, D. Eleanor	M.A., Trin	Mods. and Hist	1907	5	1			900
St. Mary's	Martin, Stephen	B.A., Tor	Math	1886	21	3½	1,400		
	Somerville, Thomas Clark	B.A., Tor	Mods. and Hist	1906	14	1		1,100	
	Firth, Joseph Wilson.....(Interim)	B.A., Tor	Science	1907	½	2		1,000	
	Jickling, Carrie Kathleen..(Interim)	B.A., Tor	Class	1906	1½				900
	Thackeray, Barton E.....(Interim)	B.A., Tor		1906	2½	2½		800	
St. Thomas	Quance, Noah	B.A., Tor	Class	1891	27		1,700		
	Voaden, Arthur C	B.A., Queen's	Commercial	1903	14	2		1,350	
	McGee, Cyril Houghton	B.A., Trin	Math	1902	12			1,250	
	Thompson, Peter McK	M.A., Queen's	Science	1904	8	6		1,250	
	Cook, Margaret	M.A., Tor	Eng., His., Fr., Ger	1903	12				1,250
	Webster, Samuel Charles	B.A., Tor		1902	6	2		950	
	Pettit, Louis John	B.A., Queen's	Eng., and Hist	1905	3	3		950	
	Jennings, Edwin William	B.A., Tor	Eng., and Hist	1907	5	4		1,200	
	Hedley, William Powell	B.A., Tor	Math	1906	3	8		950	
	Page, John Percy .....(Interim)			1908	1			800	

* Part-time teacher.

IV.—List of Principals and Assistants of Collegiate Institutes and High Schools, January, 1908.—*Continued.*

Collegiate Institutes.	Names of Teachers.	Degrees.	Specialists.	Date of appointment.	Number of years' experience in a High School or Collegiate Institute.	Number of years in a Public School.	Salary.		
							Principal.	Male Assistants.	Female Assistants.
Sarnia	Crassweller, Christopher L	B.A., Tor	Math	1902	23	2½	$1,600		
	Grant, David M	B.A., Tor	Class	1885	24			$1,500	
	Dent, William Arthur		Sci	1904	10	2		1,200	
	Reid, Robert	B.A., Tor	Eng., Hist., Fr. and Ger	1906	14	4		1,150	
	Jones, Louis E	B.A., Tor		1907	5			1,015	
	Bridgman, Clara Mary		Commercial	1902	9	3			$1,000
	Patterson, Ethel H. (Interim)	B.A., Tor	Mods. and Hist	1907	1				1,000
Seaforth	Rogers, George Franklin	B.A., Vic	Science	1899	14½		1,425		
	Colling, George Featherstone	B.A., Tor	Math	1900	9½			1,100	
	Teskey, Edith (Interim)	B.A., Tor	Class	1907	9½				1,100
	Baird, Mabel M. J	B.A., Tor	Mods. and Hist	1908	3½				800
	Chidley, Agnes F. (Interim)			1907	1	4½			750
Stratford	Mayberry, Charles Alexander	B.A., LL.B., Tor	Class	1890	25	1½	1,800		
	Lennox, Thomas H	B.A., Tor	Science	1900	21	2		1,200	
	Malcolm, George	B.A., Queen's		1890	23	6		1,100	
	Marty, Sophie E	M.A., Queen's	Eng., Hist., Fr., Ger	1900	15	3			1,200
	Robertson, George D	B.A., Queen's	Art (Interim), Com	1903	15	5		1,100	
	Brown, George Allen (Interim)	B.A., Tor	Math	1907	1½	2		1,100	
	Adams, Wm. A		(Manual Training Instructor)	1901					
	Pease, Isabel J. C		(Household Science Instructor)						
Strathroy	Kerr, Charles Staple	B.A., Tor	Eng., Hist. (Interim), Class	1906	20		1,350		
	Hedley, Robert Wesley	B.A., Tor	Math	1907	6½	3		1,150	
	Corkill, Edward James	B.A., Queen's	Science	1906	19	3		1,100	
	Houston, Jessie	B.A., Tor	Mods. and Hist	1906	4½				900
	Mallory, Bertha (Interim)		Commercial	1907	½	12			800

Toronto (Harbord St.)	Hagarty, Edward William	B.A., Tor.	Class	1891	24½	....	2,700	.....	.....
	Palmer, Eliza May	B.A., Tor.	Eng., Fr., Ger.	1891	18½	1	.....	.....	2,100
	Lawler, Gertrude	M.A., Tor.	Eng., Fr., Ger., Math.	1891	17	....	.....	.....	2,100
	Smyth, Thomas Henry	M.A., B. Sc., Tor.	Science	1891	18	4	.....	2,100	.....
	Cox, John Loane	B.A., Tor.	Math.	1892	30	....	.....	2,100	.....
	Glassey, David Alex.	B.A., Tor.	Class.	1906	12	....	.....	1,500	.....
	Forfar, Charles	B.A., Tor.	Eng. Fr., Ger.	1892	18½	6	.....	1 800	.....
	Kennedy, Lyman Aaron	M.A., Vic.	.....	1892	26½	....	.....	1,800	.....
	Clark, Luther John	B.A., Queen's	Fr., Ger.	1896	17½	6	.....	1,750	.....
	Horton, Charles W.	B.A., Queen's	Eng., Hist.	1904	14½	7½	.....	1,400	.....
	Irwin, Herbert Wm.	B.A., Tor.	Mods. and Hist.	1905	5½	....	.....	1,400	.....
	Fletcher, William Hugh	M.A., Queen's	Sci., Com.	1904	11½	4½	.....	1,400	.....
	Kennedy, Thomas	M.A., Queen's	Math.	1906	7½	2¾	.....	1,400	.....
	Jewett, Albert E.	B.A., Queen's	Science	1906	21	3	.....	1,400	.....
	Tapscott, Harry Byron ...(Interim)	M.A., McM. & Harvd.	Fr., Ger.	1906	3	6½	.....	1,400	.....
	Thompson, John Fletcher	M.A., D. Pæd, Tor.	Class.	1906	10	1	.....	1,400	.....
	Jermyn, Percy Thomas	M.A., Tor.	Eng. Hist.	1906	7½	2½	.....	1,400	.....
	McKinlay, James M.	B.A., Tor.	Class.	1907	8½	....	.....	1,300	.....
	Shaw, Robert	B.A., Tor. & McM.	Math.	1907	6	3	.....	1,300	.....
	Ketcheson, Blanche .....(Interim)	B.A., Tor.	Mods. and Hist.	1907	1½	....	.....	.....	1,300
	Keast, Walter .....(Interim)	B.A., Tor.	Math.	1907	1½	5	.....	1,300	.....
Toronto (Jameson Ave.)	Smith, Gilbert Acheson	B.A., Tor.	Science	1889	26	4	2,700	.....	.....
	Birchard, Isaac J.	M.A., Tor., Ph. D.	Math.	1893	27	11	.....	2,200	.....
	Spence, Nellie	B.A., Tor.	Class. Eng.	1889	19	1	.....	.....	2,200
	Willson, Alice M.	B.A., Tor.	Fr., Ger., Eng.	1907	5	4	.....	.....	1,400
	Cosens, Absalom	M.A., Tor.	Science	1904	11	2	.....	1,600	.....
	Mills, Jno. Hudson	M.A., Queen's	Class.	1906	17	1	.. ..	1,500	.....
	Sinclair, John	B.A., Tor.	.....	1897	19	8	.....	1,700	....
	Watson, Erwin H. A.	B.A., Tor.	Mods. and Hist.	1904	7	3	.....	1,400	.....
	Phillips, Wm. A.	B.A., Tor.	Fr., Ger., Eng.	1906	19	1½	.....	1,400	.....
	Reid, Thos. Emerson	B.A., Tor.	.....	1904	3	8½	.....	1,400	.....
	Smith, Arthur	B.A., Tor.	Science	1907	6	3	.....	1,300	.....
	Barnes, Chas. L.	B.A., Tor.	.....	1907	5	5	.....	1,300	.....
	Sealey, Ethel May	B.A., Tor.	Mods. and Hist.	1907	6	1	.....	.....	1,300
Toronto (Jarvis St.)	Embree, Luther E.	M.A., Tor.	Class, Eng., Fr., Ger.	1906	35	5	3,500	.....	.....
	Gray, Robert Alexander	B.A., Tor.	Math.	1900	23	....	.....	1,900	.....
	Lehmann, Carl A. K.	B.A., Tor.	Science	1898	12	2	.....	1,900	.....
	Michell, William Chas.	B.A., Tor.	Class.	1897	16	....	.....	1,900	.....
	Shaw, George Edmund	B.A., Tor.	Eng., Fr., Ger.	1876	32	....	.....	2,200	.....
	Jeffries, John	B.A., Tor.	Eng., Hist., Fr., Ger.	1907	20	1	.....	1,500	.....
	Clarke, Fred Hall	B.A., Tor.	Eng., Hist., Fr., Ger.	1904	12	....	.....	1,500	.....
	Ivey, Thomas Joyce	M.A., Tor.	Science	1904	11½	....	.....	1,400	.....

IV.—List of Principals and Assistants of Collegiate Institutes and High Schools, January, 1908.—*Continued.*

Collegiate Institutes.	Names of Teachers.	Degrees.	Specialists.	Date of appointment.	No. of Years' Experience in a High School or Collegiate Institute.	No. of Years in a Public School.	Salary.		
							Principal.	Male Assistants.	Female Assistants.
Toronto (Jarvis St.)—*Con.*	Keillor, James	B.A., Queen's	Eng., Hist.	1905	16	3	.....	$1,400	.....
	Thomas, Janie	M.A., Tor.	Eng., Hist.	1882	25½	1	.....	.....	$1,800
	Wightman, Robert	B.A., Tor.	Math	1903	10	...	.....	1,400	.....
	Jennings, Wm. Arthur....(Interim)	B.A., Tor.	Science	1907	1½	....	.....	1,300	.....
	Lougheed, Wm. James	M.A., Tor.	Math	1907	4½	3½	.....	1,300	.....
	Spence, Augusta Grace W. (Interim)	B.A., Tor.	Mods. and Hist	1907	2½	....	.....	.....	1,300
	Munro, Peter Fraser	M.A., Queen's.	Class.	1907	7	½	.....	1,300	.....
	Keith, George Walter	B.A., Tor.	Math	1907	9½	....	.....	1,300	.....
Toronto Junction.	Colbeck, Franklin Charles	B.A., Vic.	Class., Eng.	1894	21	1½	$2,300	.....	.....
	Gourlay, Richard	B.A., Tor.	Class., Math.	1893	21	....	.....	1,800	.....
	Charles, Henrietta	B.A., Tor.	Eng., Fr., Ger.	1901	21	....	.....	.....	1,400
	Johnston, Frederick James	M.A., Tor.	Sci.	1904	10	3	.....	1,100	.....
	Jones, George Mallory	B.A., Tor.	Eng., Hist., Fr., Ger.	1907	9	....	.....	1,300	.....
	McLellan, Catharine	.....	Commercial	1903	11	4	.....	.....	1,150
	Evans, William Arthur	.....	.....	1904	3½	14	.....	1,100	.....
Vankleek Hill	Anderson, Frank Cecil	B.A., Queen's	Science, Com.	1907	5	5	1,100	.....	.....
	Chase, Reginald Melville..(Interim)	B.A., Tor.	Class	1907	2½	....	.....	1,000	.....
	White, Robert Oliver.....(Interim)	.....	Math	1907	½	14	.....	900	.....
	McGuirl, Thomas Henry	B.A., Queen's	Com.	1906	7	5	.....	800	.....
	Trenaman, Mable Natalie	B.A., Tor.	Mods. and Hist.	1905	6	....	.....	.....	750
Whitby	Hogarth, George Henry	B.A., Tor.	Math	1900	22	....	1,250	.....	.....
	McEachern, Neil	B.A., Tor.	Science	1907	17	5	.....	950	.....
	Craig, Arthur Campbell..(Interim)	B.A., Tor.	Mods. and Hist.	1907	½	....	.....	900	.....
	Pringle, E. Gertrude.....(Interim)	B.A., Tor.	Class.	1906	2	1	.....	.....	800
	Lick, Addie	B.A., Tor.	Math	1907	6	....	.....	.....	850

Windsor	Gavin, Frederick Pearce	B.A., Queen's	Science	1892	16		1,800		
	Bell, Frederick Henry	B.A., Tor	Eng., Hist., Fr., Ger	1898	15			1,300	
	Messmore, Joseph Franklin	B.A., Tor	Class	1899	17			1,200	
	Neilson, James		Commercial	1898	11	5		1,200	
	Taylor, John Gladstone	B.A., Tor	Math	1903	8	5		1,200	
	Brunt, Robert Anthony	B.A., Tor	Science	1905	6	1		1,200	
	Cleary, Norah	B.A., Tor		1900	7				950
	Eagle, David Melville (Interim)			1907	1	9		1,150	
Woodstock	Levan, Isaac Master	B.A., Tor	Class., Eng., Mods.	1898	26½		1,700		
	Cole, James McLarty		Science	1898	16½	8½		1,250	
	Paterson, Richard Allan	B.A., Tor	Math	1907	14	3½		1,200	
	Elmslie, Wallace	B.A., Tor	Mods. and Hist	1904	6½			1,100	
	Salter, Wesley John (Interim)	B.A., Tor	Class	1907	½			1,000	
	Stone, Alice B		Commercial	1907	5½	7			900
	Wilson, Ethel Mae			1907	3½	3			750
	Mercer, John S		(Manual Training Instr.)	1905	2½	6½		1,100	
High Schools.									
Alexandria	MacKay, Donald	M.A., Tor	Class	1895	18	2½	1,400		
	Lawlor, Richard G	B.A., Queen's		1904	3½	10		1,000	
	Allen, Mabel E (Interim)	B.A., Tor	Mods. and Hist	1907	2				800
Almonte	Thompson, Margaret Jane	B.A., Queen's	Fr., Ger., (Interim), Eng., Hist.	1895	12½	6	1,100		
	Schell, Arthur William (Interim)			1905	3	3		950	
	Cowan, Samuel Geo (Interim)	B.A., Queen's	Math	1907	1	3		750	
	Lloyd, Lillie E. V (Interim)	B.A., Tor		1907	1½	1			800
Arnprior	Mabee, George Elliott	B.A., Tor	Fr., Ger	1905	14¼		1,250		
	Campbell, Alexander	B.A., Tor	Math	1906	18	3		950	
	Urquhart, May McDonald (Interim)	B.A., Tor	Science	1906	1½				900
	McPherson, Hattie Georgina	B.A., Queen's	Mods, and Hist	1907	7				700
Arthur	Snider, Egerton Eber	B.A., Vic.	Math	1896	17½	2	1,300		
	Tate, Mabel Ethel (Interim)	B.A., Tor	Class	1908	1½				900
	Howson, Bruce F (Interim)			1908		4		700	
Athens	Massey, Norman Levi	B.A., Vic.	Math	1898	20		1,150		
	Cummer, Elvina May (Interim)			1907	2½				850
	Duncan, Ethel Annie (Interim)	B.A., Tor	Mods. and Hist	1907	½	½			800
	McLean, Donalda Marion (Interim)	B.A., Queen's		1907	½				800
Aurora	Davidson, John H	M.A., Tor's, B.Pd. Tor.	Math	1907	5	7½	1,000		
	Holladay, Nellie (Interim)			1907	½	5			550
	Cornell, Mary B (Interim)	B.A., Tor	Mods. and Hist	1908	1				600

IV. List of Principals and Assistants of Collegiate Institutes and High Schools, January, 1908.—*Continued.*

High Schools.	Names of Teachers.	Degrees.	Specialists.	Date of appointment.	No. of Years' Experience in a High School or Collegiate Institute.	No. of Years in a Public School.	Salary.		
							Principal.	Male Assistants.	Female Assistants.
Beamsville	Bruels, Ira Delos	B.A., Queen's	Science	1906	20	15	$1,100	.....	.....
	Jenkins, Myrtle Mellaney	.....	.....	1905	3½	3½	.....	.....	$550
Belleville	Milburn, Edward Fairfax	M.A., Trin	.....	1893	34	....	1,300	.....	.....
	Knight, William W.	B.A., Queen's	Math	1892	21	5	.....	$1,200	.....
	Clarke, Henry Jellyman	B.A., Queen's	Science	1892	16	3½	.....	1,200	.....
	McRae, Jessie Carre	.....	Art (Interim)	1889	19	1	.....	.....	750
	Jeffers, James Frith	M.A., Tor	.....	1907	11	14	.....	1,000	.....
Bowmanville	Elliott, John	B.A., Queen's	Math., Eng	1906	24	5	1,200	.....	.....
	Carpenter, Wm. Grant	B.A., McMaster	cience	1905	2½	5	.....	1,100	.....
	Cameron, Archibald R.... (Interim)	B.A., Queen's	Class	1906	3½	....	.....	1,000	.....
	Henry, Edith May	B.A., Tor	Mods. and Hist	1907	8	3½	.....	.....	800
Bradford	Carefoot, George Andrew	B.A., Queen's	Science	1905	11	6	1,000	.....	.....
	Casselman, Colborne Lindsay .(Int.)	.....	.....	1907	½	4½	.....	700	.....
	O'Donnell, Thomas Joseph (Interim)	.....	.....	1907	½	3	.....	600	.....
Brampton	Fenton, William J.	B.A., Tor	Class	1894	17	1½	1,500	.....	.....
	Galbraith, William James	B.A., Trin	Fr., German	1887	24	12	.....	1,000	.....
	Shields, Alexander M.	B.A., Tor	Eng., Hist	1902	27	....	.....	1,000	.....
	Halnan, Lemen R	M.A., Trin	Math	1905	6	...	.....	1,250	.....
	Forrest, William	B.A., Tor	Science	1907	17	....	.....	1,100	.....
Brighton	Newman, George Edmund	M.A., Queen's	Fr., Ger.,(Interim) Eng., Hist	1896	14	5	1,000	.....	.....
	Dwyer, Mary Josephine...(Interim)	B.A., Tor	.....	1907	.....	5	.....	.....	800
Caledonia	Seaton, Edward T.	B.A., Queen's	Math	1901	17	2⅓	1,150	.....	.....
	Mitchener, James Lidney (Interim)	B.A., McMaster	Science	1906	1½	11	.....	900	.....

	Corry, Ray Laura.....(Interim)	B.A., Trin.....	.....	1907	1	....	.....	.....	700
	Campbell, Estella Kate....(Interim)	.....	.....	1905	1½	2½	.....	.....	550
Campbellford...	Sexton, James H.....	M.A., Queen's.....	Science	1907	11	9	1,300	.....	.....
	Hodgson, John Eastwood.....	M.A., Tor.....	Eng., Class.....	1906	12	....	.....	1,100	.....
	Boyes, Robert	.....	Math	1895	16	5	.....	1,000	.....
	McRae, Donella Maud.....	B.A., Queen's	Mods. and Hist.....	1907	4	2	.....	.....	800
Carleton Place..	Rand, Wilfrid Erle.....	B.A., Tor.....	Math.	1902	16	1	1,300	.....	.....
	Froats, Charles Willis ....(Interim)	M.A., Queen's.....	Class.....	1908	½	6	.....	1,100	.....
	McDonald, Neil.....	.....	.....	1890	17	6	.....	900	.....
	Thompson, Flossie Adina (Interim)	B.A., Tor	Mods. and Hist.....	1907	1	....	.....	.....	750
Cayuga	Skeele, James Eton.....	B.A., Tor.....	....	1897	15	....	1,100	.....	.....
	Harvey, Martha Anne ....(Interim)	B.A., Tor.....	Math.	1907	2	....	.....	.....	950
	McCollum, A. Laura .....(Interim)	.....	.....	1906	2	1½	.....	.....	550
Chesley	Luton, James T.....	M.A., Tor.....	Class.....	1905	9	5	1,200	.....	.....
	Longman, Edwin	.....	Math.	1904	21	7	.....	900	.....
	King, Elizabeth Giffard...(Interim)	M.A., Tor.....	Math.	1906	1	2	.....	.....	850
	Tompkins, Louis Harris...(Interim)	B.A., Queen's.....	Mods. and Hist.	1906	1	2	.....	.....	750
Colborne	Bellamy, Wesley.....	B.A., Vic	....	1892	18	3½	1,050	.....	.....
	Russell, Fanny Josephine..(Interim)	.....	.....	1906	1¾	4	.....	.....	600
Cornwall	MacLean, Allan Edmund.....	B.A., Queen's.....	Fr., Ger.....	1898	15½	5	1,450	.....	.....
	Nugent, James.....	.....	.....	1884	26½	6½	.....	1,150	.....
	Crewson, Joseph W.....	B.A., Vic.....	Class.....	1888	18	8	.....	1,100	.....
	Fetterly, Hiram B.	M.A., Queen's.....	Science.....(Interim)	1904	3½	10	.....	1,150	.....
	Birchard, Alexander Fraser.....	.....	Commercial.....(Interim)	1898	13	12	.....	950	.....
	Norris, Arthur David .....(Interim)	.....	....	1907	1½	10	.....	850	.....
	Wegg, Charlotte Sophia	B.A., Tor.	.....	1906	4	....	.....	.....	850
	Healey, Rose Etta .....(Interim)	B.A., McGill.....	.....	1906	1½	....	.....	.....	700
Deseronto	Whyte, Robert.....	B.A., Tor.....	.....	1896	12	4	1,200	.....	.....
	McEachran, Mary .....(Interim)	B.A., Queen's.....	.....	1906	1½	7	.....	.....	800
	Morden, Frances.....(Interim)	B.A., Tor.	.....	1907	1½	2	.....	.....	800
Dundas.....	Saunders, William Robert	B.A., Queen's.....	.....	1903	7½	4½	1,200	.....	.....
	Lemon, Annie M.....(Interim)	B.A., Tor.	Class.....	1907	1½	....	.....	.....	900
	Watson, Annie.....(Interim)	.....	.....	1907	½	9	.....	.....	550
Dunnville	Auld, Charles.....	B.A., Tor.	Math.	1907	13	....	1,200	.....	.....
	Saunders, Charlotte Annie	B.A., McMaster.....	Science	1906	3½	1	.....	.....	1,150
	Foster, Jessie	B.A., Queen's.....	Fr., Ger.	1907	7	....	.....	.....	800
	Stanley, Carlton W..... (Permit)	.....	.....	1908	.....	....	.....	1,000	.....

IV. List of Principals and Assistants of Collegiate Institutes and High Schools, January, 1908.—*Continued.*

High Schools.	Names of Teachers.	Degrees.	Specialists.	Date of appointment.	No. of years' experience in a High School or Collegiate Institute.	No. of years in a Public School.	Salary.		
							Principal.	Male Assistants.	Female Assistants.
Dutton	Liebner, Ernest O	B.A., Queen's	Science	1906	15	....	$1,200	.....	.....
	MacKay, John Malcolm...(Interim)	B.A., Queen's		1906	1½	7	.....	$825	.....
	Osgoode, Joseph Arthur ..(Interim)	B.A., Queen's	Class	1906	1	½	.....	675	.....
	Robinson, Berta ..... (Interim)			1907	1	2½	.....	.....	$550
East Toronto	French, Fred William	B.A., Tor.	Class	1903	17	....	1,300	.....	.....
	Graham, Louis Hartley	M.A., Tor.	Science	1903	7½	3	.....	1,000	.....
	Campbell, Edith.....(Interim)	B.A., Tor.	Mods. and Hist.	1906	2	....	.....	.....	750
	Wilkinson, Amy Florence (Interim)			1907	½	4	.....	.....	600
Elora	Pugsley, Edmund	B.A., Vic.	Science	1907	17	....	1,100	.....	.....
	Blyth, Sara			1905	2½	7	.....	.....	625
	McCallum, Kathleen.....(Interim)	B. A., Tor.		1907	2	2	.....	.....	550
Essex	Anglin, Robert W	M A., Queen's	Math.	1902	9½	....	1,300	.....	.....
	Scratch, Linnie May		Science, Commercial	1907	11	....	.....	.....	1,050
	Williams, Mary Isabella...(Interim)	B.A., Queen's	Mods. and Hist.	1906	1½	....	.....	.....	800
	*Ward, Rev. Geo. B	M.A., McGill		1907	13	....	.....	.....	.....
	McKenny, A	B.S.A., Tor.	(Agriculture Instuctor)	1907	.....	....	.....	1,200	.....
Fergus	Freeman, John Alexander	B.A., Tor.	Class	1903	19	....	1,100	.....	.....
	Van Alstyne, Susan A.... (Interim)	B.A., Tor.	Math.	1908	.....	3	.....	.....	800
	Lawlor, Lenora Charlotte..(Interim)	B.A., Tor.		1907	.....	....	.....	.....	600
	Whitney, Laura A.....(Interim)			1908	.....	2	.....	.....	700
Forest	Barron, Robert Armour	B.A., Tor.	Class., Eng., Fr., Ger.	1905	25½	5	1,000	.....	....
	Williams, Albert			1906	3	5	.....	850	.....
	Wright, Ola .....(Interim)			1907	½	2	.....	.....	600

Fort William....	Hamilton, William John	B.A., Queen's	Science	1907	7	15	1,800		
	Pilkey, Peter Joseph	B.A., Queen's		1901	9	8		1,500	
	Wood, Elmore Everton	B.A., McMaster	Math.	1902	6½			1,400	
	Calhoun, Alexander (Interim)	M.A., Queen's	Class	1906	1½			1,400	
Gananoque	Graham, Robert George	B.A., Vic	Math	1894	16½		1,500		
	Milne, Thomas Fred (Interim)		Commercial	1907	2	5½		900	
	Ewing, Florence May	B.A., Queen's		1907	3½	2			800
	Hicks, Fred Montford (Interim)			1907	2½	2½		900	
Georgetown	Coutts, Richard David	B.A., Tor	Class	1897	12	3	1,200		
	Cantelon, John Wilfred (Interim)	M.A., Tor	Math	1906	1½	4		975	
	Bielby, George Henry (Interim)	B.A., Tor		1907	½	7		950	
	Watson, Agnes Myrtle (Interim)			1907		2½			550
Glencoe	Foucar, Walter K	M.A., Tor	Eng., Hist., Fr., Ger	1905	12½		1,050		
	Johnson, Leah Bedena (Interim)	M.A., Tor	Math	1907	1				850
	Ross, Marion Lillie (Interim)			1907	½	3			550
Gravenhurst	McNab, George Gibbon	M.A., Queen's	Math	1907	4	5	1,100		
	Filshie, Marion W. (Interim)	B.A., Tor		1905	3	*			625
	Broughton, Clara Elizabeth (Interim)			1906	2½				475
Grimsby	Harrison, Charles W.	M.A., Vic		1894	21		900		
	Strang, Rose Innis			1900	10				600
	De La Mater, Magdaleine			1908	1½				500
Hagersville	Elliott, Thomas Edward	B.A., Tor	Eng., Hist., Fr., Ger	1905	20		1,000		
	Wright, Robert			1896	12	4½		825	
	Hind, Edith (Interim)			1907	½	3½			600
Harriston	Donaldson, William	B.A., Tor	Science	1906	9	5½	1,100		
	Robertson, Alexander Morton	M.A., Queen's	Math., Fr., Ger	1906	13	3		1,000	
	Gray, George Leishman (Interim)	B.A., Tor	Eng. and Hist	1907				800	
Hawkesbury	Asselstine, Robert Whiting	B.A., Queen's		1907	6	3	1,200		
	Higginson, Maria Adelaide			1897	10½	2½			700
	Penson, Elizabeth (Interim)			1906	1½	1			700
Iroquois	Stanley, Thomas E. A	B.A., Tor	Math	1897	15		1,150		
	Marlin, Lewis A. (Interim)			1907	1½	10		1,000	
	Rose Marion H		Fr., Ger	1898	13½	4			800
	Connor, Grace L. (Interim)	M.A., Queen's	Class	1906	1½				700

* Part time teacher.

IV. List of Principals and Assistants of Collegiate Institutes and High Schools, January, 1908.—*Continued.*

High Schools.	Names of Teachers.	Degrees.	Specialists.	Date of appointment.	No. of years' experience in a High School or Collegiate Institute.	No. of years in a Public School.	Salary.		
							Principal.	Male Assistants.	Female Assistants.
Kemptville	Nelson, John	B.A., Queen's	Math	1906	15	4	$1,050		
	Ferguson, John (Interim)	B.A., Queen's		1907	2	10		$1,000	
	Cowan, Margaret Taylor (Interim)	B.A., Tor	Class	1906	1				$800
	Keegan, Joseph D			1905	2	13		750	
	Layng, Lillian Isabel (Interim)	M. A., McMaster	Mods. and Hist	1907					600
Kenora	Wilson, W. Asbury	B.A., Queen's		1903	8½		1,500		
	Berlanquet, Hugh Smith	B.A., Queen's	Class	1907	4			1,200	
	Bibby, Marie Victoria	B.A., Tor	Mods. and Hist	1908	3				900
Kincardine	Perry, Samuel Walter	B.A., Vic	Class	1890	26		1,350		
	Courtice, Samuel James	B.A., Tor	Math	1903	4	6		1,050	
	Flock, Frank Arthur (Interim)	B.A., Tor	Sci	1907	½	2½		1,000	
	Teskey, Kathleen	M.A., Queen's	Mods. and Hist	1905	2½				900
	Sweet, Fred. George (Interim)			1907	½	2½		650	
Leamington	Tremeer, James	B.A., Vic	Class	1906	20	3	1,200		
	Hamilton, William Brown (Interim)	B.A,, Tor	Math	1907		3		900	
	Stewart, Etta Murray	B.A., Tor	Eng., Fr. Ger	1907	10				800
	Forbes, William Brownie		Sci	1907	11			1,000	
Listowel	Nichol, William Wallace	B.A., Tor	Math	1898	9⅜	1½	1,200		
	Ramsay, William	B.A., Queen's	Class	1905	3½	6		1,000	
	Rowland, Robert Henry (Interim)	B.A., Tor	Fr., Ger	1907		⅓		900	
	Preston, Ethel Ada			1907	2½	1			600
Lucan	Sprung, Whitfield Lyman	B.A., Tor	Math	1906	3½	4½	1,100		
	Dearness, Jean M (Interim)	B.A., Western		1906	1½				650
	Carter, Florence Victoria (Interim)	B.A., Tor	Mods. and Hist	1907	½				600
	Tuke, William H (Interim)			1905	2½			800	

Madoc	Watson, Alexander H.	B.A., Tor		1889	24	3	1,200	
	Leighton, Edna C.			1907	3½	2		850
	Tuer, Margaret (Interim)			1907	1	6		550
Markham	Reed, George Henry	M.A., B. Pæd, Tor.	Class	1890	19	4	1,200	
	Truscott, Samuel A.	M.A., Queen's	Math	1906	2½	7	1,000	
	Mairs, Edith Matilda	M.A., Trin.		1903	5			675
	Fuller, Royden John (Interim)			1907		6	950	
	Thomson, Olive M. (Interim)			1906	2	3½		550
Meaford	Cornwell, John Leslie	B.A., Tor	Math	1900	21		1,300	
	Dundas, Arthur A.	B.A., Tor		1897	12	2	1,100	
	Johnson, George Stephen, (Interim)	B.A., McMaster	Sci	1907			900	
	Stewart, Kate L. (Interim)	B.A., Tor	Eng. and Hist	1907		½		800
	Hammond, John E (Interim)		Commercial	1906	1	3	750	
Midland	Simpson, Ernstein	B.A., Tor	Math. (Interim)	1904	5½	3	1,300	
	Glass, William Arthur	B.A., Tor		1904	4½	1½	1,050	
	Smith, Lillias Pearl	B.A., Tor		1904	3½			725
	Grove, Wilmot George (Interim)	B.A., Queen's	Math	1906	1½		850	
Mitchell	Morrow, John D.	B.A., Tor	Class	1905	11		1,125	
	Amoss, Harold E (Interim)	B.A., Queen's, B. Pæd., Tor.		1907	½	6	900	
	Clifford, Margaret (Interim)	M.A., Queens	Eng. and Hist	1907		6		700
Mount Forest	Brethour, John Henry	B.A., Vic.	Class	1891	27	5	1,200	
	Clarke, George A.			1905	2½	6	900	
	Speirs, Thomas E. (Interim)	B.A., Tor	Math	1907	¼	2½	900	
Newburgh	Denyes, James Malcolm	B.A., Queen's	Fr., Ger.	1907	9½	3	1,050	
	Grange, Helen Aldworth (Interim)	B.A., Tor		1907	1½			750
	Beaman, Grace Evelyn (Interim)			1906	1¾	1¾		750
Newcastle	Davidson, Hugh	B.A., Tor		1888	22	2	900	
	Grose, Annie R. (Interim)			1905	2½	6½		450
Newmarket	Coombs, Albert Ernest	M.A., B.Pæd., Tor.	Class	1899	15½		1,200	
	Hollingshead, John Edwin			1884	23	2½	900	
	Lawr, Waldron (Interim)			1906	2	5	875	
Niagara	Wright, William Jonathan	M.A., Tor.	Class	1904	6½	3	900	
	Anderson, Lillie Catherine			1904	4	3½		525
Niagara Falls South.	Fitzgerald, Eliza S	M.A., Queen's	Class	1904	23		1,200	
	Laird, Marie Ettie (Interim)			1907		3		550

IV. List of Principals and Assistants of Collegiate Institutes and High Schools, January, 1908.—*Continued.*

High Schools.	Names of Teachers.	Degrees.	Specialists.	Date of appointment.	No. of Years' Experience in a High School or Collegiate Institute.	No. of Years in Public School.	Salary.		
							Principal.	Male Assistants.	Female Assistants.
Niagara Falls South.—*Con.*	Smith, Gladys Hubner ....(Interim)	.....	.....	1906	1	½	.....	.....	$550
	*Dawson, Margaret.....	.....	(Commercial).....	1907	.....	....	.....	.....	.....
North Bay.....	Girdwood, Arthur Reginald	B.A., McMaster	Math	1904	4½	....	$1,300	.....	.....
	Trench, Wm. Wycliffe A. (Interim)	B.A., Tor	Class	1907	3½	5	.....	$1,100	.....
	Barr, Janet.....	B.A., Queen's	.....	1903	11	1	.....	.....	900
Norwood.	Maclean, Godwin V.....	M.A., Tor.....	Math.....	1908	16	1½	1,200	.....	.....
	Archer, Mary Alice	B.A., Tor.....	.....	1904	4	....	.....	.....	700
	Dell, Bertha .....(Interim)	.....	.....	1908	.....	1½	.....	.....	700
Oakville	Lillie, John Turner	B.A., Vic	Class.....	1905	20	....	1,300	.....	.....
	Hobbs, Thomas.....	B.A., Tor.....	Math.....	1906	5½	5½	.....	900	.....
	Pierce, Ada E. ....(Interim)	B.A., Queen's.....	.....	1906	2½	1½	.....	.....	800
Omemee	Jardine, William Wilson	B.A., Tor.....	.....	1898	24	12	900	.....	.....
	Harvey, William Blakely.....	.....	.....	1903	26	14	.....	750	.....
Orangeville.	Steele, Alexander.....	B.A., Tor.....	Eng. Math.....	1879	31	....	1,500	.....	.....
	Haviland, Hugh J.....	B.A., Tor.....	Class.....	1907	7	....	.....	900	.....
	Calvert, Joseph Fletcher .(Interim)	M.A., McMaster.....	Science.....	1906	3	1½	.....	950	.....
	Hutchinson, May Riordan.....	.....	.....	1904	5	6	.....	.....	650
	Strang, Grace Masson .... (Interim)	B.A., Tor.....	Mods. and Hist.....	1907	1½	....	.....	.....	750
Oshawa	Smith, Lyman C.....	M.A., Vic.....	Class., Eng., Hist.....	1882	30	3	1,400	.....	.....
	Slemon, Edward T.....	B.A., Vic.....	Math.....	1892	15	5½	.....	1,100	.....
	Stevenson Louis.....	B.A., Vic.....	Math., Science	1902	15	3	.....	1,100	.....
	McConkey, Cath. M. R. ..(Interim)	B.A., Queen's.	Fr., Ger....	1907	2	....	.....	.....	800
	Skitch, Ernest Frederick	.....	Commercial.....(Interim)	1907	3½	2	.....	900	.....

Paris	Bell, Walter N.	B.A., Tor	Class	1898	17		1,400		
	Williams, Edna Jane (Interim)	B.A., Tor		1907	½				775
	Cunningham, Eva G. (Interim)	B.A., Tor		1906	3				700
	Moffat, Thomas Edward (Interim)			1907	½	3		900	
Parkhill	Andrews, David	M.A., Queen's	Math	1907	4	5	1,200		
	Guest, Emily Jane	M.A., Tor	Eng., Hist	1901	6½				900
	MacGregor, Annie Kennedy (Interim)	B.A., Queen's		1907	½	1			800
	Cruickshank, Libbie			1907	2½	6			750
Pembroke	Ross, Ralph	B.A., Tor	Class	1895	21		1,350		
	White, Edwin Theodore	B.A., B.Pæd., Tor	Math	1901	7½	3		1,150	
	Shirreff, Robert Marshall		Fr., Ger	1895	12½			1,000	
	McLaurin, Kate (Interim)	B.A., McMaster	Science	1908	1				1,100
Penetanguishene	Keefe, Reuben Daniel	B.A., Tor		1907	5⅓		1,200		
	Closs, Frank David		Science	1907	11	2½		900	
	Seery, Winifred (Interim)			1906	1⅓	4			600
Petrolea	Bell, John Johnstone	B.A., Tor		1888	22	1	1,200		
	Clyde, Wm.	M.A., Queen's		1888	21	1		1,050	
	Hills, Minnie	B.A., Tor.	Math	1903	6				1,000
	Hagan, James William			1906	3	5		1,000	
Picton	Dobson, Robert	B.A., Vic	Math	1880	43	3½	1,300		
	Dolan, John Henry	B.A., Queen's	Class	1899	4½			1,200	
	Bigg, Edmund Murney	M.A., Tor	Science	1906	30			1,100	
	Gilchrist, Dugald A. (Interim)	B.A., Tor	Eng., Hist	1905	2½	7		1,100	
	Gibson, Ethel (Interim)	B.A., Tor	Mods. and Hist.	1907	2½				800
Plantagenet	Walsh, John C. (Permit)	B.A., Ottawa		1907	2		1,000		
	McIntyre, Lizzie E. (Interim)			1907	1	3			500
	Parent, Louis Lefroi (Permit)			1906	1½	20		500	
Port Arthur	Howell, William, B. L.	B.A., Tor	Class	1904	11		1,600		
	Cranston, David Loudon	B.A., Tor.	Math	1907	4			1,200	
	Atchison, Belle			1903	12	3			850
Port Dover	Liddy, William R.	B.A., Tor.	Science	1897	11	4½	1,000		
	Dadson, Helena (Interim)	B.A., Queen's.	Mods. and Hist	1907	½	9½			600
Port Elgin	Bald, Wm. Francis	B.A., LL.B., Tor.	Class	1907	11	3	1,300		
	Innes, Alexander R.			1892	20	6		850	
	MacVannel, Margaret C. (Interim)	B.A., Tor.		1907	½				600

* Part time teacher.

IV. List of Principals and Assistants of Collegiate Institutes and High Schools, January, 1908.—*Continued.*

High Schools.	Names of Teachers.	Degrees	Specialists.	Date of appointment.	No. of Years' Experience in a High School or Collegiate Institute.	No. of Years in Public School.	Salary.		
							Principal.	Male Assistants.	Female Assistants.
Port Hope	Kirkconnell, Thomas A	B.A., Queen's	Math	1888	22	3	$1,550		
	Morgan, John James	B.A., Tor	Science	1905	12	3		$1,100	
	Ward, Clara Anne	B.A., Tor	Mods. and Hist.	1906	5½				$800
	Moir, Catharine Elizabeth			1896	13½	4			700
Port Perry	McBride, Dugald	B.A., Vic	Class., Math.	1871	36	14	1,300		
	Stone, George			1883	26	4		1,000	
	Smith, Annie Maria	B.A., Tor		1904	3				700
	Young, Albert			1905	2			700	
Port Rowan	Houston, John	M.A., Tor	Eng., Fr., Ger.	1907	28	6	1,000		
	Shawcross, Mary Louise			1903	4½	2			550
Prescott	Kerfoot, Horace Watson	B.A., Queen's		1907	3	11	1,200		
	Weese, Willametta (Interim)	B.A., Queen's		1906	1½	3½			750
	Leighton, Robert Henry			1907	6	19		1,000	
	Rodgers, Bertha May (Interim)			1908		2½			600
Richmond Hill	Henry, Thos. McKee	B.A., Tor	Math	1907	24	4	1,100		
	Lemon, Sarah Jane (Interim)	B.A., Tor		1907	½				700
	Edwards, Mabel Cordelia (Interim)			1906	1½				500
Rockland	O'Hagan, Thomas	B.A., Ph.D., Ottawa		1908	7½	10	1,100		
	Sweeney, Agnes Calvary			1905	2½	3½			600
	Eby, Florence Mary	B.A., Tor		1908	3½				650
Sault Ste. Marie	Race, Wilfred Ballantyne	B.A., Queen's	Mods. and Hist.	1904	15		1,600		
	Rudlen, George William	B.A., Tor	Math	1904	9½			1,200	
	Williams, Lorne Joseph	B.A., Queen's		1906	8	2½		1,175	
	Harkness, Mary Dell (Interim)	M.A., Queen's		1907	1	6			900

Simcoe	Christie, James Douglas	B.A., Tor	Eng., Fr., Ger	1889	30	1,300		
	Might, Lincoln	M.A., Queen's	Science	1905	11	3	1,100	
	Lingwood, Frederick H	M.A., Trin., B.A., Lon., Eng	Class	1904	15		1,100	
	Hutchison, Robert A	M.A., Queen's	Math	1906	2	6	1,000	
	Goodland, Alma (Interim)			1907	1	10		700
Smith's Falls	Rose, Robert Chas	B.A., Tor	Math.,	1907	16	3½	1,300	
	Anderson, Wm. George	B.A., Tor.	Eng., Hist. (Interim), Class	1907	6½	3½	1,200	
	MacLaurin, Peter Crawford	B.A., McMaster	Science	1907	3		1,200	
	Lunny, Rosemary	B.A., McGill		1904	3½			800
Smithville	Elliott, William Moore	M.A., Tor		1907	20	1	1,100	
	Hill, Mary Alpena			1902	5¾	3¾		600
Stirling	Kennedy, George E	B.A., Vic	Science	1893	15	4	1,050	
	Hamilton, Margaret Alison (Interim)	B.A., Tor	Mods. and Hist	1906	1			700
	Stothers, Minerva Evelyn (Interim)	B.A., Queen's		1907	½			600
Streetsville	Cameron, Aldis W	B.A., Tor	Eng., Hist	1898	14½		1,000	
	Ireland, Franklin N (Interim)	B.A., Man		1908	2½	4	750	
	Fisher, Edna B. V (Interim)		Commercial	1908	½	1		500
Sudbury	Davidson, John	M.A., LL.B., Tor	Class	1908	27	3	1,400	
	Adie, Jessie Morton (Interim)	B.A., Tor	Mods. and Hist	1908	¼			900
	MacKenzie, Eva Florence (Interim)			1908	¾	9		900
Sydenham	Reid, Marvin Ryckman	M.A., Queen's	Science	1907	8¾	5½	1,100	
	DeCou, Nellie (Interim)	B.A., Tor	Fr., Ger	1907	1½	2½		700
	Baker, Sarah Jane (Interim)			1907	1½	2½		700
Thorold	Myer, Albert N	M.A., Trin	Math	1907	14		1,100	
	Smith, Margaret Hubner			1898	13			750
Tillsonburg	Minns, James Edward	B.A., Vic	Science, Math	1904	16	3	1,300	
	Kidd, Wm. Livingstone (Interim)			1905	3	10	850	
	Harrison, Frederick Wm. (Interim)	B.A., Queen's		1908	1	6	800	
	Solmes, Harriette Mary (Interim)	B.A., Queen's		1908	1	1		600
Toronto, Riverdale	Crawford, Henry J	B.A., Tor	Class	1907	23	2,600		
	Moore, James Rosington	M.A., Queen's	Science	1907	9	½	1,500	
	Wren, John Stewart	B.A., Tor	Math	1907	8		1,500	
	Ferguson, Wm. Chalmers	B.A., Tor	Eng., Fr., Ger	1907	17½		1,500	

IV. List of Principals and Assistants of Collegiate Institutes and High Schools, January, 1908.—*Continued.*

High Schools.	Names of Teachers.	Degrees.	Specialists.	Date of appointment.	No. of Years' Experience in a High School or Collegiate Institute.	No. of Years in Public School.	Salary.		
							Principal.	Male Assistants.	Female Assistants.
Toronto, Technical	Eldon, Robert Henry	B.A., Queen's	Math., Com	**1904	16	7	$2,600	.....	.....
	Young, William D.	B.A., M.D., Tor.	.....	1899	* 8	.....	.....	$1,800	.....
	McBean, John Wm.	B.A., Tor.	.....	1902	* 5	.....	.....	1,700	.....
	Warren, James McIntosh	B.A., Tor.	Math.	1903	*13½	.....	.....	1,700	.....
	Kirkland, William Stuart	M.A., Queen's	Science	1903	*11½	1	.....	1,650	.....
	Ward William	B.A., Queen's	Com.	1906	13	5	.....	1,500	.....
	McPherson, Walter Ernest	B.A., Tor., LL.B, Qu's	Eng., Hist., Fr., Ger.	1904	11½	1	.....	1,500	.....
	Wilson, William James... (Interim)	B.A., Tor.	Science	1902	*5½	.....	.....	1,400	.....
	Baird, William	.....	Com.	1903	*5	4	.....	1,400	.....
	Rutherford, William Herbert	M.A., Tor	Math	1904	4½	.....	.....	1,400	.....
	Rundle, John Ashton	.....	.....	1904	3½	18½	.....	1,400	.....
	Tennant, Isabella Leathern	B.A., Tor.	Mods. and Hist.	1904	6½	.....	.....	.....	$1,400
	Downey, Helen Elizabeth	B.A., Tor.	Mods. and Hist.	1904	7	.....	.....	.....	1,400
	Wood, Frank Herbert	B.A., Tor.	Math.	1905	2½	.....	.....	1,400	.....
	Edward, Wesley Grafton	.....	Com.	1907	2½	1	.....	1,300	.....
	Bailey, Joseph James	.....	.....	1907	3½	4½	.....	1,300	.....
	Peake, Charles Nicholson	.....	(Instructor in Drafting)	1898	.....	.....	.....	1,400	.....
	†Hahn, Gustav	.....	(Instructor in Design)	1902	.....	.....	.....	1,000	.....
	†Banks, John Lisney	.....	(Instructor in Modelling)	1906	.....	.....	.....	600	.....
	†Mackenzie, John Alexander	.....	(Instructor in Architecture)	1906	.....	.....	.....	550	.....
	†Hahn, Emanuel	.....	(Instructor in Freehand)	1907	.....	.....	.....	720	.....
	Davidson, Margaret Mary	.....	(Instructor in Household Sci.)	1902	.....	.....	.....	.....	1,400
	Macmillan, Margaret Jane	.....	do	1903	.....	.....	.....	.....	800
	DeLaporte, Marie Annette	.....	do	1907	.....	.....	.....	.....	750
	‡Edwards, Emma May	.....	do	1907	.....	.....	.....	.....	.....
	‡Sheffield, Lillian Forster	.....	(Instructor in Household Art)	.....	.....	.....	.....	.....	.....
	‡Coles, Evelyn Stadacona	.....	do	.....	.....	.....	.....	.....	.....
	‡Shanley, Frances Elizabeth	.....	do	.....	.....	.....	.....	.....	.....
	‡Ronan, Gladys	.....	(Instructor in Freehand)	.....	.....	.....	.....	.....	.....

	‡Maynard, Carmen Moses		do							
	‡McGugan, Donald Johnston		(Instructor in Drafting)							
	‡Carscallen, Hobart Rodney		do							
	‡Barber, Frank		(Instructor in Mathematics)							
	‡Rumble, Isaac Albert (Interim)		Math., Com. (Instr. in Math.)							
	‡Dewar, Angus		(Instructor in Mathematics)							
Trenton	Ingall, Elmer Ellsworth	B.A., Tor	Eng., Hist. (Interim)	1895	17	5½	1,200			800
	Pattee, Mrs. Ada		Eng., Hist	1905	20					800
	Ashall, Frances Mabel (Interim)	B.A., Tor	Math	1907	½					700
	White, Minerva Margaret (Interim)			1906	1½	11				
Uxbridge	Park, Henry George	B.A., B.Ped., Tor	Class	1888	25	4	1,200			
	Smillie, Robert (Interim)	B.A., Tor	Math	1907	2	2		1,000		
	MacArthur, Christina M.			1907	12	3				575
	Jeckell, Laura M. (Interim)			1908		2½				550
Vienna	Bonis, Henry	B.A., Tor	Class	1905	17½	1	850			
	Wheelton, Leonard (Interim)			1907		2		600		
Walkerton	Morgan, Joseph	M.A., Tor	Class	1881	28		1,300			
	Norris, James C.	M.A., Queen's	Math	1903	16	3		1,100		
	McGregor, Margaret C (Interim)	B.A., Tor		1908	½	2				600
Wardsville	Dickey, Mary Ada	B.A., Tor	Mods. and Hist	1906	5		800			
	Goulding, Hannah Mitchell			1902	5½	2½				580
Waterdown	Perry, Peter	M.A., Tor	Class	1902	30		1,000			
	Ricker, Harry E. (Interim)			1906	1½	10		700		
	Reid, E. Lily (Interim)			1906	1½	3				450
Waterford	Hume, John Patterson	B.A., Queen's	Science	1906	16½		1,200			
	Zavitz, Arthur Stanford (Interim)			1906	1½	3		800		
	McKenna, Leone Helen (Interim)	B.A., Tor	Mods. and Hist	1907	⅓					550
Watford	Potter, Charles	B.A., Tor	Math	1892	22	5	1,200			
	Williamson, James David (Interim)			1908	8			800		
	McLeod, Lola (Interim)	B.A., Queen's		1907	1½					550
	Mitchell, Blanche H (Interim)			1907	1	4				550

** Dates of appointment to the school which became a High School in 1904.
* Includes experience in this school previous to 1904.
† Part time teachers—Day and Evening Classes.
‡ Part time teachers—Evening Classes only.

IV. List of Principals and Assistants of Collegiate Institutes and High Schools, January, 1908.—*Continued.*

High Schools.	Names of Teachers.	Degrees.	Specialists.	Date of appointment.	No. of Years' Experience in a High School or Collegiate Institute.	No. of Years in a Public School.	Salary.		
							Principal.	Male Assistants.	Female Assistants.
Welland	McQuaig, Herbert M	B.A., Queen's		1891	23	....	$1,300	.....	.....
	McNiece, James	B.A., Tor	Science	1896	12	3	.....	$1,200	.....
	McPhail, Alexander C	B.A., Queen's		1907	15	9	.....	800	.....
	Fortner, Miss Theodora	B.A., Tor	Mods. and Hist	1906	3½	....	.....	.....	$600
	Brennan, Jennie L.....(Interim)			1906	2	3	.....	.....	550
Weston	Campbell, Archibald Louis	M.A., Queen's	Math.....(Interim)	1906	13½	8	1,100	.....	.....
	Hawkins, Maud Mary	B.A., Tor	Mods. and Hist	1904	7	...	.....	.....	750
	Burchill, Alfred M.....(Interim)	B.A., Queen's		1907	.....	17	.....	850	.....
Wiarton	Baines, Archibald W	M.A., Trin		1895	12	4	1,100	.....	.....
	McDougall, Isabella J.....(Interim)	B.A., Tor	Eng., Hist., Fr. and Ger	1906	1½	3	.....	.....	800
	Case, H. James.....(Interim)			1907	1	12	.....	825	.....
Williamstown	McDonald, James	M.A., Queen's	Eng. Hist., Class	1898	14	....	1,200	.....	.....
	Witheril, Ebenezer Rufus	B.A., Queen's		1895	14	20	.....	900	.....
	Patterson, Harriett.....(Interim)	B.A., Queen's		1907	.....	1	.....	.....	750
Wingham	Taylor, John Andrew	B.A., Queen's	Science	1906	9	3	1,300	.....	.....
	Workman, James G.....(Interim)	B.A., Tor	Math	1906	2	1	.....	1,000	.....
	Smith, John Charles.....(Interim)	B.A., Queen's	Class	1907	2	3	.....	900	.....
	MacVannel, Janet .....(Interim)	B.A., Tor	Mods. and Hist	1907	.....	....	.....	.....	800

Number of Schools, Sex of Teachers, and Percentages.

Collegiate Institutes	42
High Schools	102
Total	144
Increase for the year	2

Teachers.

Gentlemen	521
Ladies	229
Total	750
Increase for the year	31

Percentages.

January, 1908...	Gentlemen,	69.46 ;	Ladies,	30.53
January, 1907...	"	71.35 ;	"	28.65
January, 1906...	"	74.2 ;	"	25.8
January, 1905...	"	77 ;	"	23
January, 1904...	"	78.8 ;	"	21.2

Number of Teachers.

Collegiate Institutes.

Principals	42
Assistants	330
Total	372
Increase for the year	17

High Schools.

Principals	102
Assistants	276
Total	378
Increase for the year	14

Grand Total.

Principals	144
Assistants	606
Grand Total	750
Increase for the year	31

Salaries.

Collegiate Institutes.

Highest salary	$3,500
Average " Principals	1,747
" " Assistants	1,183
Average Salary	$1,247
Increase for the year	$71

High Schools.

Highest Salary	$2,600
Average " Principals	1,225
" " Assistants	871
Average Salary	$967
Increase for the year	$57

Collegiate Institutes and High Schools.

Highest Salary	$3,500
Average " Principals	1,377
" " Assistants	1,040
Average salary	$1,105
Increase for the year	$66
Average salary, Men Assistants	$1,174
" " Women "	815
Increase for the year, Men	$83
" " " Women	53

Universities, etc., of Teachers.

Collegiate Institutes and High Schools.

Toronto	341
Victoria	27
Queen's	150
Trinity	13
McGill	3
McMaster	19
Ottawa	2
Western	1
Manitoba	2
British	2
Interim Certificates	194
Specialists	396
Interim Specialists	107
B. S. A.	6
D. Pæd	1
B. Pæd	7
Ph. D	2
Graduates	562
Non-Graduates	188
Permits	3
Percentage of Graduates	74.93
Percentage of Non-graduates	25.07
Percentage of Specialists and Interim Specialists	67.07
Percentage of Non-specialists	32.93

APPENDIX Y.—LIST OF INSPECTORS, ETC.

January, 1908.

Jurisdiction.	Public School Inspectors.	Post Office.	Number of School Rooms (departments) in inspectorate.	Salary of Inspector of 1907.	Expenses.	Total allowance for salary and expenses in 1907.
				$ c.	$ c.	$ c.
Algoma District; Towns of Blind River, Bruce Mines, Massey, Sault Ste. Marie, Steelton, Thessalon, Webbwood	L. A. Green, B.A.	Sault Ste. Marie	109	1,973 00	56 27	2,029 27
Brant; Town of Paris	T. W. Standing, B.A.	Brantford	80	1,520 00	195 00	1,715 00
Bruce, East; Towns of Chesley, Walkerton, Wiarton; Villages of Hepworth, Tara	John McCool, M.A.	Walkerton	122	1,537 62	283 11	1,820 73
Bruce, West; Towns of Kincardine, Southampton; Villages of Lucknow, Paisley, Port Elgin, Teeswater, Tiverton	W. I. Chisholm, M.A	Kincardine	123	1,545 50	310 00	1,855 50
Carleton; Village of Richmond	Thos. Jamieson, B.A.	Ottawa	159	1,748 00	300 00	2,048 00
Dufferin; Town of Orangeville; Villages of Grand Valley, Shelburne	Nathaniel Gordon	Orangeville	117	1,502 00	250 50	1,752 50
Dundas; Villages of Chesterville, Iroquois, Morrisburg, Winchester	Arthur Brown	Morrisburg	107	1,442 00	235 50	1,677 50
Durham and S. Monaghan Tp.; Towns of Bowmanville, Port Hope; Villages of Millbrook, Newcastle	W. E. Tilley, M.A., Ph.D.	Bowmanville	139	1,610 00	285 00	1,895 00
Elgin; Town of Aylmer; Villages of Dutton, Port Stanley, Springfield, Vienna	Welburn Atkin	St. Thomas	140	1,637 00	240 00	1,877 00
Essex, North (No. 1); Town of Sandwich; Village of Belle River	*D. Chenay	Windsor	37	1,084 00	150 00	1,234 00
Essex, South (No. 2); Towns of Amherstburg, Essex, Kingsville, Leamington	D.A.Maxwell,B.A.,LL.B.,Ph.D	Windsor	116	1,496 00	249 00	1,745 00
Frontenac; Villages of Garden Island, Portsmouth	Wm. Spankie, M.D.	Kingston	152	1,700 00	300 00	2,000 00
Glengarry; Town of Alexandria; Villages of Lancaster, Maxville	Donald McDiarmid, M.D	Maxville	86	1,314 50	203 60	1,518 10
Grey, East; Town of Thornbury	Samuel Huff, B.A.	Meaford	76	1,700 00		1,700 00
Grey, West; Town of Owen Sound; Village of Chatsworth	H. H. Burgess, B.A.	Owen Sound	112	1,472 00	258 00	1,730 00

Grey, South; Towns of Durham, Hanover, Meaford; Villages of Dundalk, Markdale, Neustadt	N. W. Campbell	Durham	123	1,522 00	267 00	1,789 00
Haldimand; Town of Dunnville; Villages of Caledonia, Cayuga, Hagersville	Clarke Moses	Caledonia	100	1,400 00	225 00	1,625 00
Haliburton, South Nipissing, East Parry Sound; Towns of Bonfield, Mattawa, Powassan; Village of South River	Sylvanus Phillips, B.A.	Minden	112	2,130 00	85 50	2,215 50
Halton; Towns of Milton, Oakville; Villages of Acton, Burlington, Georgetown	J. S. Deacon	Milton	93	1,358 00	500 00	1,858 00
Hastings, North; Villages of Bancroft, Madoc, Marmora, Stirling	William Mackintosh	Madoc	124	1,544 00	261 00	1,805 00
Hastings, South; Town of Deseronto; Village of Tweed	H. J. Clarke, B.A.	Belleville	85	1,670 00	20 00	1,690 00
Huron, East; Towns of Clinton, Seaforth, Wingham; Villages of Blyth, Brussels, Wroxeter	David Robb, B.A	Brussels	122	1,512 00	311 00	1,823 00
Huron, West; Town of Goderich; Villages of Bayfield, Exeter, Hensall	J. Elgin Tom	Goderich	132	1,589 00	271 00	1,860 00
Kent, East; Towns of Blenheim, Bothwell, Dresden, Ridgetown; Village of Thamesville	Rev. W. H. G. Colles	Chatham	96	1,376 00	200 00	1,576 00
Kent, West; City of Chatham; Town of Wallaceburg; Village of Tilbury	J. H. Smith, M.A	Chatham	120	1,740 00	210 00	1,950 00
Lambton, East; (No. 2); Town of Petrolea; Villages of Alvinston, Arkona, Oil Springs, Watford	N. McDougall, B.A.	Petrolea	125	1,550 00	267 00	1,817 00
Lambton, West (No. 1); Towns of Forest, Sarnia; Villages of Courtright, Point Edward, Thedford, Wyoming	John Voaden, M.A	Sarnia	125	1,544 00	261 00	1,805 00
Lanark; Towns of Almonte, Carleton Place, Perth, Smith's Falls; Village of Lanark	F. L. Michell, M.A	Perth	166	1,739 00	324 00	2,063 00
Leeds and Grenville, No. 1; Town of Gananoque; Villages of Newboro, Westport	Wm. Johnston, M.A., LL.B.	Athens	100	1,400 00	225 00	1,625 00
Leeds and Grenville, No. 2; Village of Athens	Robert Kinney, M.D	Brockville	90	1,340 00	210 00	1,550 00
Leeds and Grenville, No. 3; Town of Prescott; Villages of Cardinal, Kemptville, Merrickville	T. A. Craig	Kemptville	93	1,386 00	204 00	1,590 00
Lennox and Addington; Town of Napanee; Villages of Bath, Newburgh	D. A. Nesbitt, M.A.	Newburgh	134	1,730 00	150 00	1,880 00
Lincoln; Town of Niagara; Villages of Beamsville, Grimsby, Merritton, Port Dalhousie	W. W. Ireland, B.A.	St. Catharines	88	1,302 00	448 00	1,750 00

* Also Inspector of R. C. Bilingual Separate Schools in Essex and Kent.

APPENDIX Y.—LIST OF INSPECTORS, ETC.—*Continued.*

January, 1908.

Jurisdiction.	Public School Inspectors.	Post Office.	Number of School Rooms (departments) in inspectorate.	Salary of Inspector of 1907.	Expenses.	Total allowance for salary and expenses in 1907.
				$ c.	$ c.	$ c.
Manitoulin Island, etc.; Towns of Copper Cliff, Gore Bay, Little Current, Sudbury	John McLaughlin	Gore Bay	76	1,700 00	443 72	2,143 72
Middlesex, East; Village of Lucan	P. J. Thompson, B.A.	London	113	1,478 00	265 85	1,743 85
Middlesex, West; Towns of Parkhill, Strathroy; Villages of Ailsa Craig, Glencoe, Newbury, Wardsville	H. D. Johnson	Strathroy	103	1,427 00	260 25	1,687 25
Muskoka District; Towns of Gravenhurst, Huntsville; Village of Port Carling	H. R. Scovell, B.A.	Bracebridge	107	566 66	7 90	574 56
Nipissing District, etc.; Towns of Cache Bay, Cobalt, Englehart, Haileybury, Latchford, New Liskeard, North Bay, Sturgeon Falls	J. B. McDougall, B.A.	North Bay	175	1,700 00	45 65	1,745 65
Norfolk; Town of Simcoe; Villages of Delhi, Port Dover, Port Rowan, Waterford	H. Frank Cook, B.A.	Simcoe	129	1,578 50	306 77	1,885 27
Northumberland; Towns of Campbellford, Cobourg; Villages of Brighton, Colborne, Hastings	Albert Odell	Cobourg	135	1,616 00	279 00	1,895 00
Ontario, North; Town of Uxbridge; Villages of Beaverton, Cannington, Port Perry	James McBrien	Prince Albert	86	1,316 00	300 00	1,616 00
Ontario, South; Towns of Oshawa, Whitby	John Waugh, B.A., D.Paed.	Whitby	86	1,322 00	280 00	1,602 00
Oxford; City of Woodstock; Towns of Ingersoll, Tillsonburg; Villages of Embro, Norwich	William Carlyle	Woodstock	190	1,790 00	309 00	2,099 00
Parry Sound West, District; Town of Parry Sound; Villages of Burk's Falls, Sundridge	Rev. Geo. Grant, B.A.	Orillia	113	1,500 00	305 35	1,805 35
Peel; Town of Brampton; Villages of Bolton, Streetsville	Allan Embury	Brampton	98	1,388 00	222 00	1,610 00
Perth; Towns of Listowel, Mitchell, St. Mary's; Village of Milverton	William Irwin, B.A.	Stratford	138	1,697 00	309 00	2,006 00
Peterborough; Villages of Havelock, Lakefield, Norwood	J. Coyle Brown and Richard Lees, M.A.	Peterborough	120	2,320 00	380 00	2,700 00

Prescott and Russell; Towns of Hawkesbury, Vankleek Hill; Villages of Casselman, L'Orignal, Rockland	W. J. Summerby	Russell	119	1,511 00	294 00	1,805 00
Prince Edward; Town of Picton; Villages of Bloomfield, Wellington	G. D. Platt, B.A.	Picton	92	1,352 00	227 00	1,579 00
Renfrew; Towns of Arnprior, Pembroke, Renfrew; Villages of Cobden, Eganville	R. G. Scott, B.A.	Pembroke	199	2,000 00		2,000 00
Simcoe, North; Towns of Barrie, Collingwood; Village of Creemore	G. K. Mills, B.A.	Collingwood	116	1,503 00	272 50	1,775 50
Simcoe, Southwest; Towns of Alliston, Stayner; Villages of Beeton, Bradford, Tottenham	Rev. Thos. McKee, B.A.	Barrie	120	1,520 00	280 00	1,800 00
Simcoe East; Towns of Midland, Orillia, Penetanguishene	Isaac Day, B.A.	Orillia	117	1,508 00	252 00	1,760 00
Stormont; Town of Cornwall; Village of Finch	Alexander McNaughton	Cornwall	98	1,448 00	222 00	1,670 00
Thunder Bay and Rainy River Districts; Cities of Fort William, Port Arthur; Towns of Kenora, Fort Frances, Rainy River	John Ritchie	Port Arthur	130	1,830 00	39 60	1,869 60
Victoria, East; Town of Lindsay; Villages of Bobcaygeon, Omemee	J. H. Knight	Lindsay	69	1,220 00	186 02	1,406 02
Victoria, West, and Southeast Muskoka; Town of Bracebridge; Villages of Fenelon Falls, Woodville	W. H. Stevens, B.A.	Lindsay	110	1,943 00	204 00	2,147 00
Waterloo, No. 1; Towns of Berlin, Hespeler, Preston, Waterloo; Village of Elmira	Thomas Pearce	Berlin	121	1,508 00	300 00	1,808 00
Waterloo, No. 2; Town of Galt; Villages of Ayr, New Hamburg	F. W. Sheppard	Berlin	92	1,352 00	213 00	1,565 00
Welland; City of Niagara Falls; Towns of Thorold, Welland; Villages of Bridgeburg, Chippawa, Fort Erie, Port Colborne	J. H. Ball, M.A	Welland	135	1,694 00	180 00	1,874 00
Wellington, North; Towns of Harriston, Mount Forest, Palmerston; Village of Clifford	Robt. Galbraith, B.A.	Mount Forest	100	1,500 00		1,500 00
Wellington, South; Villages of Arthur, Drayton, Elora, Erin, Fergus	J. J. Craig, B.A.	Fergus	95	1,500 00		1,500 00
Wentworth; Town of Dundas; Village of Waterdown	J. H. Smith	Hamilton	106	1,448 00	250 00	1,698 00
York, North; Towns of Aurora, Newmarket; Villages of Holland Landing, Richmond Hill, Sutton	C. W. Mulloy, B.A.	Aurora	110	1,430 00	232 00	1,662 00
York, South; Towns of East Toronto, North Toronto, Toronto Junction; Villages of Markham, Stouffville, Weston, Woodbridge	David Fotheringham	Toronto	193	1,686 50	369 70	2,056 20

APPENDIX Y.—LIST OF INSPECTORS, ETC.—*Concluded.*

January, 1908.

Jurisdiction.	Public School Inspectors.	Post Office.	Number of School Rooms (departments) in inspectorate.	Salary of Inspector of 1907.	Expenses.	Total allowance for salary and expenses in 1907.
Belleville, City of	J. C. Morgan, M.A	Toronto	21	$ 400 00		$ 400 00
Brantford, "	J. P. Hoag, B.A	Brantford	49	1,500 00		1,500 00
Guelph, "	Wm. Tytler, B.A	Guelph	32	600 00		600 00
Hamilton, "	W. H. Ballard, M.A	Hamilton	167	2,500 00		2,500 00
Kingston, "	W. G. Kidd	Kingston	51	1,500 00		1,500 00
London, "	C. B. Edwards, B.A	London	129	1,735 00		1,735 00
Ottawa, "	John C. Glashan, LL.D	Ottawa	126	2,700 00		2,700 00
Peterborough "	A. Mowat, B.A	Peterborough	36	1,600 00		1,600 00
St. Catharines"	D. C. Hetherington	St. Catharines	25	1,200 00		1,200 00
St. Thomas "	S. Silcox, B.A., D.Paed	St. Thomas	40	1,350 00		1,350 00
Stratford "	J. Russell Stuart	Stratford	30	1,000 00		1,000 00
Toronto "	James L. Hughes, Chief Insp'r.	Toronto	593	4,000 00		4,000 00
Toronto "	W. F. Chapman, B.A	Toronto		3,000 00		3,000 00
Windsor " and Town of Walkerville	Robt. Meade, M.A	Windsor	50	1,335 00		1,335 00
Brockville, Town of		Brockville	22	1,000 00		1,000 00
Trenton, "	John Johnston	Trenton	9	75 00		75 00
Totals, *Public School Inspectors*				125,961 28	$14,991 79	140,953 07
	R. C. Separate School Inspectors:					
R. C. Separate Schools, Central	Wm. Prendergast, B.A	Toronto	191	1,700 00	319 45	2,019 45
" East	Michael O'Brien	Peterborough	165	1,700 00	560 50	2,260 50
" West	J. F. Sullivan, B.A	Ottawa	184	1,559 67	560 10	§2,119 77
" Districts and East	Jas. E. Jones, B.A	Mattawa	176		163 30	163 30
" Districts and East	V. H. Gaboury, B.A	Plantagenet	108			
Bilingual Separate Schools, East	T. Rochon, B.A	Ottawa	185	1,700 00	249 77	1,949 77
Bilingual Separate Schools, Essex & Kent Co's.	‡D. Chenay	Windsor	47	500 00		500 00
Technical Education	*Inspector of Technical Education*: Albert H. Leake	Toronto		2,000 00	509 45	2,509 45
County Model Schools	*County Model School Inspector*: J. J. Tilley	Toronto		2,000 00	416 40	2,416 40
Collegiate Institutes and High Schools	*High School Inspectors*: J. E. Wetherell, B.A	Toronto		3,000 00	503 12	3,503 12
" "	H. B. Spotton, M.A	Toronto		3,000 00	451 19	3,451 19
Continuation Classes	*Inspector of Continuation Classes*: R. H. Cowley, B.A	Toronto		2,500 00	493 00	2,993 00

‡ Also Inspector Public Schools, Essex North.

§ Salary, etc., in part, of former Inspector Power.

APPENDIX Z—FINANCIAL STATEMENTS OF THE FACULTIES OF EDUCATION.

I. UNIVERSITY OF TORONTO FACULTY OF EDUCATION.

Expenditure for year ending 30th June, 1907.

Dr. W. Pakenham, Dean of the Faculty and Professor of the History and Science of Education, 6 months' salary	$1,375 00

II. QUEEN'S UNIVERSITY FACULTY OF EDUCATION.

Receipts for year ending December 31st, 1907.

Ontario Government	$5,000 00
Fees	585 00
Over expended	54 61
	$5,639 61

Expenditure for year ending December 31st, 1907.

Salaries	Dean Lavell	$1,250 00	
	O. J. Stevenson	900 00	
	R. J. Stewart	375 00	
	A. A. Jordan	50 00	
			$2,575 00
Board of Education	W. S. Ellis, Supervisor of High School Work and Course in School Management	150 00	
	Five Specialists' Courses in Methods	500 00	
	A. A. Jordan, additional salary for assistance in Public School Work	125 00	
	Sixteen Junior Teachers at $25	400 00	
	Arts, Constructive, Domestic Science, Commercial Work	300 00	
	Music	50 00	
	Secretary, Janitor	50 00	
			1,575 00
Travelling Expenses	Principal Gordon	16 50	
	Dr. Knight	16 75	
	D. M. McIntyre	17 25	
	Dean Lavell	125 55	
			176 05
Advertising, Printing and Stationery	News	3 00	
	Mail and Empire	6 00	
	Tribune	2 43	
	Globe	1 29	
	Evening Post	2 23	
	Nation	1 80	
	New England Pub. Co.	2 03	
	A. McKim & Co	298 11	
	British Whig	13 90	
	Jackson Press	63 00	
			393 79
Office Furniture and Equipment	K. & P., $1.63; G.T.R., $1.55	3 18	
	R. J. Lindsay	240 72	
	A. R. Reading	14 30	
	W. H. Rau	20 70	
	Office Specialty Co	106 55	
			385 45
Library	Miss L. Saunders		250 00
Athletics			114 00
Registrar's Office	Typewriting Account, Stamps, etc		150 00
Telegraph, Telephone, etc	Bell Telephone	7 75	
	G. N. W. Telegraph	2 27	
	Express, Telegraph and Telephone	10 30	
			20 32
			$5,639 61

APPENDIX "A 1." REPORT OF INSPECTION OF THE AGRICULTURAL DEPARTMENTS IN THE HIGH SCHOOLS.

By President Creelman, Ontario Agricultural College, Guelph.

To the Minister of Education:

At your request I have visited the different High Schools in Ontario in which instruction is being given in the Science of Agriculture, and I beg leave to hand you at this time a brief report of the work.

1. *Origin.*—For years, those in authority in educational and agricultural affairs in the Province, have realized that the principles underlying the science of agriculture should be taught in our schools. Simple text-books have been written and introduced into the schools, and yet nothing apparently had been accomplished in the direction desired. In country places agricultural education has been left largely to such organizations as the Farmers' Institute and the Agricultural Society, and as not more than one or two meetings were held in the same place in one year, no course of study has ever been attempted. In fact, both of these institutions dealt largely with matured men and were in no way schools of instruction. This state of affairs continued, until last year when Dr. John Seath, Superintendent of Education, and Mr. C. C. James, Deputy Minister of Agriculture, each prepared a memorandum bearing on the subject, and although neither of them knew that the other was working on the problem, their recommendations were right along the same lines.

Dr. Seath suggested: "Select eight or ten suitable high school centres, offering each a substantial fixed grant for, say, three years, and participation thereafter in a special legislative grant for agriculture.

"The course in agriculture for high school pupils should include Agriculture, Horticulture, Dairying, Manual Training (Carpentry, Blacksmithing), Veterinary Topics, Art (including Farm Architecture), and should provide, in addition, a good general English education, for which the other teachers of the school should be available as well as the special teachers of agriculture when occasion would serve. Moreover, just as the present high school teachers are local centres of university influence, so the teacher of agriculture would be a local agent of the Agricultural College and a local centre for the dissemination of agricultural knowledge."

Mr. James recommended: "Select now, say, four young men and also four points at which they would be stationed. Make this proposition to the school boards of these four towns: the Department will provide your High School with a teacher of agriculture for the next three years if you will permit him to organize a class in agriculture in your High School, and also if you will provide him with a small plot of ground for experimental purposes. This young man would conduct the classes and with his class take charge of the experimental plots, the material for which would be supplied by the Experimental Department of the college. At the end of the three years' work the Board of Trustees would be expected to continue the work of instruction, themselves paying for the services of the teacher in agriculture, just as they provide the other teachers or masters of the school, and the Government representative would be free to give his whole time to the general work of the agriculture of the county. This agricultural teacher would be able to give the teachers in the model school some instruction in

nature study, attend teachers' conventions, and also from time to time advise with rural school teachers who were really trying to teach their pupils the simple principles underlying agriculture.

"He should have an office where he could be found for consultation at stated times, and at other times he should be out among the farmers. He would be the directing man in the Agricultural Society, the Farmers' Institute, the Horticultural Society and the Farmers' Club. While he could not be expected to know all things, yet he would be able to procure information for them as might be desired. He would be the man "on the spot" to report new diseases, new pests as soon as they arrive, and to report to headquarters with a view to procuring help. Through him the special needs of the district could be investigated and all departmental movements could be directed. He would be able to systematize a great deal of work that is now done spasmodically. He should be expected to go to the Agricultural College for, say, ten days or two weeks every year to inform himself as to the new work there being done with the object of taking the results back to those farmers who are unable to visit the college. The result of personal contact would be found much more effective than through the sending of printed reports and bulletins. To put it in another form, he would increase many fold the value of printed publications. Set down in a county a live, energetic, enthusiastic young man, trained in the best practice of farming and having an agricultural college education, and tell him to study the farmers' conditions, assist them in their work, to find out their needs, and direct them along the best lines, and in a few years the effect would be most satisfactory."

Acting on these recommendations, the Government selected six places, viz., Lindsay, Perth, Morrisburg, Collingwood, Galt, and Essex, and on June 1st, 1907, six graduates of the Ontario Agricultural College had been appointed and at once commenced work in the places named.

In inspecting these centres of agricultural instruction, the first thing that impressed me was the enthusiasm manifested by the instructor in his work: busy from early morning until late at night teaching in the school, meeting farmers in the offices down town, writing letters to farmers all over the country, arranging for short coures of instruction at home or at outside points, preparing plans for experimental plots for the coming summer, attending Farmers' Institute meetings, and in every possible way putting himself in a position to help the country boy and his father to bigger and higher things in his home life and in his life work on the farm. That you may see just how each man views the situation, after eight months' residence, I take the liberty of adding a brief report from each of the six men.

Report of F. H. Reed, B.S.A., Lindsay.

Coming to Lindsay in June, I reached the county at a very opportune time. The county council was in session and I made an opportunity to explain to each member what was proposed in this method of extending agricultural education. Later Mr. C. C. James came down, and with Mr. S. J. Fox, M.P.P., addressed the county council. They succeeded in impressing on the council the value of this movement, and also its financial needs, and secured a grant of three hundred dollars, with a provisional grant of two hundred more, if required. This money was placed under the control of a joint committee of three members from the county council and three members from the Board of Education. The final disposition of this money was to use three hundred and twenty-five dollars in purchasing a plot for experimental grounds, and to pay over to the Treasurer of the Board of Education one hundred and seventy-five dollars to pay for equipment placed

in the Collegiate Institute. The plot is deeded to the county and is thus held as county property.

Thus actively supported by the county council, the Board of Education at once made plans to prepare a class-room in the Collegiate Institute. All regular class-rooms, as well as the laboratory, were already filled to overflowing, and a new class-room had to be made. This was done by partitioning off part of the large stage in the assembly hall in the third floor of the College Institute building. By means of a moveable partition a very suitable class-room, with seats for twenty-five pupils, was separated from the main hall. This class-room has been equipped with blackboard and cabinets for storing equipment, is well lighted and heated, and has proved to be one of the best class-rooms in the building. The total cost of alterations, cabinets, and equipment for 1907 was five hundred and sixty dollars. To meet this the Board of Education had three hundred dollars from the Government grant of one thousand dollars and one hundred and sixty-five dollars from the county council grant, thus leaving a balance of eighty-five dollars to be met by the regular funds of the Board of Education.

As yet the number of pupils attending the classes has not been large. Numerous reasons may be given for this. Of the total attendance at the collegiate of 314 students but 97 come from farm homes. Of 77 pupils who entered the collegiate in September last, only 19 are from farm homes. The students for this course must come almost entirely from our farms, and as the course was not explained to the farmers until August, they were not for this year sufficiently informed concerning the course to appreciate its advantages and to send their sons. By visiting the public schools of the county during May and June, and by explaining to the entrance classes and to the parents of the boys who may be interested just what is meant by agricultural education in the Collegiate Institute, and by explaining the advantages which the course offers, I am confident that we shall all be able to secure good classes for next September.

One of the greatest benefits of the teaching of agriculture in the Collegiate Institue will be to offer special winter courses for young men from sixteen to twenty-five years of age, who have been for some years out of school and at work on the farm. This year we announced such a course for two months, February and March, and we now have five young men taking this course. The subjects taught are animal husbandry, field husbandry, horticulture, dairying, veterinary anatomy, veterinary pathology, agricultural botany, farm book-keeping and farm management. For this course I take the classes from 9 to 4 o'clock for five days in the week. In a two-month course it is not possible to go very deeply into these subjects, but a large amount of useful information will be imparted and the interest of these young men will be sufficiently aroused to induce them to continue their studies as further opportunity may be found. Also, next year this course may be opened in January and thus be extended to a three-month course.

This year part of my time during January was spent in attending Farmeres' Institute meetings and in making preparations for a five day short course in stock and seed judging. This course was held from January 28th to February 1st, and despite stormy, cold weather and very bad roads proved to be a very great success. Prof. C. A. Zavitz had charge of the seed judging, which was conducted from 9 to 10.30 each morning. The attendance for this course taxed to the utmost the accommodation of the town hall and averaged about 250 men. Prof. G. E. Day and Dr. H. G. Reed had charge of the stock judging, which was conducted in the Opera House, the stock being placed on the large stage. The average attendance at this part of the

course, which was held from 10.30 to 5 o'clock, was about 450. On the last day horses were discussed and the attendance was over 700 men. Also in connection with this course President Creelman and Mr. C. C. James delivered addresses at meetings held on Tuesday and Friday evenings. Both speakers were greeted with a crowded opera house and received an enthusiastic reception.

The presence in Lindsay for a week of Professors Day and Zavitz, and the addresses of President Creelman and Mr. James, very forcibly brought before the people of Victoria county the work of the Agricultural College at Guelph. For some time this must be one of the chief advantages of this extension work in agricultural education, to bring the farmers and the farmers' sons and daughters into close touch with and to a proper appreciation of the great centre of agricultural education in this Dominion, the Ontario Agricultural College. Many of those who this year took a five-day short course in stock and seed judging at Lindsay will next winter go to the O.A.C. for a much better two weeks' short course in stock and seed judging. Also many of the young men who take the three-month winter course at the collegiate will later go to the O.A.C. for the two-year course. Why? Because in these short courses here they have learned what agricultural education means and they have perceived the advantages which it offers. The Collegiate Institute courses should thus prove great feeders for the Ontario Agricultural College.

The work of the teachers of agriculture, or as they may perhaps be more correctly termed, representatives of the Department of Agriculture, is many sided. A most important part of the work is done through the town office. The office in Lindsay is furnished as a reading-room and is gradually being equipped as an agricultural library. The reading table is supplied with copies of many of our farm journals and every means is taken to make the office a meeting place for farmers while in Lindsay. Many farmers daily come in and ask for information on many and varied topics. Mixed farming is the rule in Victoria county and the questions include orchard pruning, vegetable and fruit growing, stock raising, and diseases of stock, tile drainage, weed eradication, and seed improvement. The most frequent questions are concerning methods of destroying weeds, particularly the perennial sow thistle. Also I have been frequently asked concerning the improvement of farm crops by seed selection, and I have induced several farmers to join the Canadian Seed Growers' Association. While attending Farmers' Institute meetings in December and January, the topic on which I was most frequently asked to speak was "Tile Drainage—Its Cost and Its Returns." When speaking on this subject I had with me a surveyor's level and explained the method used by surveyors in staking out a system of drainage. Also, I offered, when farms or fields were quite level, and the mapping out of a system of drains required accurate work, to go out with the level, survey the land, and help in deciding accurately the location and fall of the required drains. Already many requests have come in, and for a while, both in the spring, and more so in the fall, I shall be busy at this work. In this county, with its deep, rich, but in many parts poorly drained, soil, tile drainage is a most important improvement and will yield large returns on all capital invested. During the winter months I have been several times requested to attend meetings of Farmers' Clubs. In so far as time would permit, I have done so, but though I realize that these Farmers' Clubs are important, and though I know that if I had had the time I could have organized several clubs in various villages throughout the country, yet because my time has been fully occupied at the Collegiate, I have been unable to undertake this

work. Also I have been compelled to refuse several invitations from my county councillors to hold meetings in the north end of the county at public schools. Some of this work I hope to do during June, and also I hope that some arrangement may be made by which I may, during the next winter, be able to be away more from the Collegiate and have more time for work in the country.

Conclusions.

After nine months' experience in my district, I am confident that this placing of young men in various parts of the Province, as teachers and organizers, will prove one of the most important movements ever adopted in agricultural education. In this district the advancement of the work will be limited only by the funds, and the men available to carry on work for which the farmers are waiting. Already there is more work than one man can accomplish, and to properly carry on the work would require one man in the Collegiate and a second man to take charge of the organizing and educational work which could be done through the office. A most important feature of the work is that, more than any other means of agricultural education, it can be made to appeal to the boys and young men on the farm. The large majority of those attending Farmers' Institutes are men over thirty. It is these same men who read the farm journals and farmers' bulletins, but these do not appeal to the boys and the young men from sixteen to twenty-five. These young fellows, however, will come out to a stock and seed judging course and also to a two or three-month course in the Collegiate. To interest the boys and the young men, and to give to them at the commencement of their life on the farm much of what it has cost their fathers a life time of exjerience to learn, will be the greatest benefit of teaching agriculture in the Collegiate Institutes.

I have stated that the work of the short course in stock and seed judging, together with the addresses of President Creelman and Mr. James, did much to arouse in the farmers a proper conception of the meaning and value of agricultural education. The impression made on the citizens of Lindsay was even stronger. The presence in town for a week of so many farmers brought home to the townspeople a realization of the direct benefit which this new line of agricultural education is to the farmers, and also a realization of the fact that its establishment in Lindsay will later prove of great indirect benefit to the town. Lindsay is a farmers' town, and from the institution of the course many of the most influential citizens have been enthusiastic in their support of the movement for teaching agriculture in the Collegiate. The work has already met with much success, and the short course in stock and seed judging proved such a surprise, both in attendance and in the knowledge imparted, that the majority now realize the meaning and importance of agricultural education. Thus from both town and country hearty co-operation and support are assured. The county council have promised to again deal generously in granting the necessary financial support. Experience has already brought to me a broader and clearer conception of the possibilities and requirements of the work. We are planning much work and during 1908 much good work will be accomplished.

Report of R. S. Hamer, B.S.A., Perth.

Perth as a business centre depends almost entirely upon the agricultural resources of the surrounding country, and when it was learned that the Board of Education had succeeded in securing for the Collegiate Institute one of the six agriculturists appointed by the Government, the leading busi-

ness men were quite ready to support the movement. When I undertook the work in June, and commenced to get in touch with local sentiment and conditions, I found that outside of the deputation who had been in Toronto no person knew anything definite regarding the working out of the scheme. In the meantime some very wild misconceptions had gained ground. The establishment of the branch here was looked upon as an act of paternalism on the part of the Government, and while it was expected that the County Council would give financial support, the idea of a supplementary grant from the town being required was not even thought of. As it worked out, the County Council, for reasons aside from the question and of purely local significance, did not support the idea, thereby dampening to a certain extent the enthusiasm of some of the town supporters. The action of the Council was, however, hotly censured by the local press, and other papers throughout the county criticized their action very severely. The leading men of the town, who had now become better posted on the details of the idea, saw that the expense to the town would be practically nil, and realizing that in a year's time the attitude of the Council would in all probability be reversed, encouraged the Board to go ahead and give the new Department every chance to demonstrate its usefulness. The Local Member, Col. Matheson, supplemented the Government grant by a liberal personal contribution and in his occasional addresses throughout the Riding did much to arouse popular support.

From the first the Board of Education have given me every consideration, have adopted my suggestions in every case, and have virtually given me a free hand in the expenditure of the money granted for equipment and maintenance. The principal of the school has shown a willingness to oblige me, and to facilitate the work in the school, both in questions of adjustment of time-table, in arranging for accommodation, and in looking after the class when outside duties occasionally prevent me from being present. The running of my own department he has left entirely to me—an action much appreciated. The townspeople have taken a great deal of interest in my work from the first, and from both business and professional men I have received every personal courtesy. The local newspapers have been very generous in devoting space to various phases of my work, which space I have made use of editorially and in reporting and announcing meetings and other features connected with my work. In the country there was at first more or less indifference and even skepticism regarding the value of both the school course and the office, but in the last six months interest in the surrounding townships have been steadily increasing.

In organizing a class in the school I received a great deal of assistance from rural school teachers and from the Public School Inspector. Our class from the first consisted of eight pupils. This number we were unable to increase, owing to the limit of accommodation in the general first year class-room having been reached. In December I announced a short course in conjunction with the principal of the business college here. Two boys entered this course and several others expressed their desire to do so but were prevented from coming in by extra work at home. These boys take agriculture during my morning hours at the school and during the afternoons, and all day Monday they are at the business college. Much of their work is apart from that being taken up by the boys in the long course. My two-year course in agriculture is adapted to local conditions and is not intended to cover all of the O.A.C. first year work. In fact, in some branches we have already covered considerable second year work. In live stock, the different breeds of beef and dairy cattle, and of light and heavy horses have been studied. The

class are thoroughly familiar with Craig's text on the judging of these classes, and have had some practical work in judging. Considerable time has been put on the study of feeds and the boys are now able to intelligently work out a ration based on the chemical composition of the constituent feeding stuffs. In Field Husbandry, "Seeds and Crops" by Morrow and Hunt, has been used as a text and has been supplemented by the study of experimental results in Guelph and Ottawa. Seed judging has been a practical phase of the course. In Dairy Husbandry, Prof. Dean's "Canadian Dairying" has been followed as a text, but not systematically. They have become proficient in the use of the Babcock test and have an intelligent idea of the principles underlying it. Structural Botany—the root, stem, leaf, flower, fruit, and seed—has been gone into in detail. Special study has been put upon weed eradication and the application of the Seed Control Act. Germination experiments of various kinds have been conducted from the first. Drawing has been an important feature of this part of the course. Soil-physics and surveying have been important subjects. In the latter, the class during the autumn did considerable work with the chain and also with the level. Field notes of the experimental plot taken in the fall have been used in the winter to plan out the ground for work in the spring. The class have also studied the question of underdrainage in detail and have plotted out profiles of several drains using field notes from levels previously taken. The interest of the boys in this work is indicated in the way in which they attend Farmers' Institute Meetings, Farmers' Club Meetings, and other agricultural gatherings without special solicitation. In the class-room work they are full of intelligent questions and are continually bringing in questions from their neighbors.

The work of the school, in connection with the office, has been the most arduous part of my duties but has, at the same time, been the most interesting and gives the greatest promise of results. The office, which was opened in September, is conveniently situated and is well adapted to the purpose. The outer part of the office, with a seating capacity for about one hundred, is used as a general reading-room and meeting-room. During the early fall I found it difficult to get people greatly interested in the office, chiefly for the reason that those who did visit it found it frequently empty. Much of my time was spent out in the country becoming acquainted with people, and in gathering information pertaining to local conditions and problems. At the leading Fall Fairs I displayed an exhibit loaned by the Biological Department of the O.A.C., which attracted a great deal of attention. Later in the fall callers at the office became more and more frequent. Many came in merely to get acquainted, while others came to talk over questions of various kinds.

During the Farmers' Institute Meetings I addressed all of the meetings in this Riding and one in Grenville County, dealing with various subjects of local interest and also taking occasion to outline the nature of my work. At the meeting in Perth I brought up the matter of organizing a Farmers' Club. The club organized on that occasion has been the means of bringing me into close touch with a great many farmers. Our meetings, starting with an attendance of about forty-five, have grown in numbers until now my office can scarcely accommodate the crowd. A great deal of interest has been aroused in the practical questions of general improvement discussed, and in addition, at least two important questions affecting local interests have been taken up by the Club and settled. During the supplementary Institute sessions I addressed the different meetings with a special view of offering assistance in laying out of the underdrainage systems during the

coming year, and also of conducting co-operative experiments in swamp soil investigations. The advantage taken of these offers indicates that during the coming season I shall have an opportunity to carry on a great deal more of this work than I can accomplish without assistance.

On February 26 and 27, the office scored another success in a special Poultry Institute. About one hundred and fifty attended these meetings, which were in reality a short course in poultry. The speakers, Mr. Graham and Miss Yates, were beyond criticism and the audience was interested and appreciative to the point of enthusiasm. Considering the fact that the people of this district are not extensively interested in poultry, either as fanciers or on a commercial scale, the result of this series of meetings is very gratifying, indicating as it does the increasing interest taken in the work of the office.

Undoubtedly the work here is being popularized more quickly through the office than through the school. The value of the office as a channel through which information may be obtained is beginning to be appreciated by the farmers, and it is this capacity that the usefulness of the new Department has, up to the present, been most fully demonstrated. This has, I understand, been the experience of all of us engaged in the work, and in view of the greater prospects of development through the outside work, I should like to recommend to the Department the desirability of removing us entirely from the Collegiate Institute Staff and of placing us directly under the control of the Department of Agriculture. With our services tendered to the Board of Education for stated periods, our relationship to the school would remain the same as far as our duties are concerned, and our position would be relieved of much of its present incongruity. Our office work would no longer appear as a side line but would receive its proper recognition in the eyes of the public, and we would be placed on a better basis to deal with both farmers and townspeople. I would also take this opportunity to ask that provision be made whereby a part of the work in the school may, from time to time, be performed by an assistant working under my instruction. If the outside work which has been undertaken for this season is to be performed with any degree of satisfaction, and if the office and school work are to receive proper attention, it will be necessary for me to have an assistant after Easter. I have been given to understand by the Department of Agriculture that my application for a Second Year O.A.C. man to act in this capacity is receiving consideration. If, in addition to keeping the office open while I am away, assisting me with the office routine and with the work throughout the country, this man could, from time to time, relieve me from the school work, it would be of great assistance in making the influence of the office felt in distant parts of the county. I would ask, therefore, that if the regulations do not already permit of an arrangement of this kind, the Collegiate authorities be authorized to allow it. I would also recommend that after this year pupils be admitted to the Two-Year Course in Agriculture in the High Schools only in accordance with the regulations that govern the admission of other High School pupils but that Section 2 of the admission requirements remain as it stands at present.

Report of W. A. Munro, B.S.A., Morrisburg.

I. *Conditions upon Arrival.*—When I arrived upon the scene last June 1 found the citizens of Morrisburg jubilant over the prospects of an Agricultural College, and the neighboring places jealous that it had been placed where it was. The real conception of the nature of the scheme had not been

grasped by even the school board, and high hopes were entertained that eventually Morrisburg would become a second Guelph.

The School Board had made the purchase of fourteen acres of land adjoining the school and were ready to further the scheme as much as possible. High hopes were expressed on all sides that there would be great development.

II. *Reception.*—(*a*) By the townspeople. The citizens ever since the day of my arrival have exhibited a most friendly feeling towards me and my work and have been interested in every movement.

(*b*) By the farmers. The difficulty with the farmers has been to make them believe that the place is for their benefit and that its success or failure depends as much upon their efforts to receive it as upon the equipment of the school, and the efficiency of the teacher. There was no immediate financial profit to promise them and hence they looked askance. But not for long. As more and more opportunity was afforded me for conversation with representative men from different communities, and the true nature of the meaning of the work became known, it was better and better received by them until now the invitations to come out to speak at different centres are more than I can comply with. The farmers of this county believe that they are favored above their fellows of other districts in having an institution of this kind in their midst.

(*c*) By the school authorities. The Board of Education have complied with every request that I have made and more than once have given me to understand that so far as they are concerned, I am to have a free hand. With a knowledge that they are so much in sympathy with me and my work, I cannot help but feel that I have in them a strong support.

III. *Work in the School.*—Directly I have done nothing in the school, but indirectly I have accomplished the good will of the students and the staff of both the Collegiate institute and of the Public School. I say this because I am on the most friendly terms with the teachers. The Principal of the Model School has asked me for my co-operation in the establishment of a school garden; the students of the Collegiate ask for my assistance in their sports, debates, and so forth; the little children come at all times with questions about birds, flowers, trees, and insects; and teachers and students of both schools frequent my office for reading and for consultation of various questions arising out of my work.

IV. *Outside of the School.*—My work has been almost wholly outside of the school. Until the middle of November I contented myself with driving to the different parts of the constituency and talking with the farmers; but as soon as the weather was such as to prevent any kind of farm work from being carried on, I immediately organized what I have been pleased to call Day Schools. These are classes similar to Farmers' Institute Meetings, except that only one subject is dealt with on one day and demonstrations are given by means of live animals. My attention has been almost wholly directed to the subjects of judging and breeding dairy cattle, and horses. In the afternoon of each day I conducted a demonstration in judging and in the evening gave an address on breeding.

At four places I have dealt with both the subjects of dairy cattle and horses, and have been glad to notice a larger attendance at my second meetings than at my first. I have no accurate estimate of the value of my work in this respect, but if one is to judge by the questions asked, the discussions and the general interest and good will in the meetings, it is quite evident that the work will mean, directly, a great improvement in the class of live stock

kept, and indirectly, an interest and faith in the honest effort of the Department of Agriculture to come into closer touch with the farmer.

Besides my appearance at the Day Schools, I have been present at eleven Farmers' Institute Meetings, at each of which I spoke on one subject of direct practical interest and also on the subject of my work. I endeavor to be present at and speak wherever I am invited, including such occasions as dairymen's meetings, social gatherings, and any other assembly of the farmers.

I organized and conducted with the assistance of Prof. Graham and Miss Yates a very successful two-day Poultry Institute, and have under way the organizing of a Fruit Institute, to be held in Iroquois. Although there are no cow-testing associations organized in the county, I believe that a number will soon be formed as a result of my work on dairy cattle during the winter.

The office has been open to the public for two and a half months, and is growing in favor continually. Every week sees an increase of interested visitors and enquirers. I endeavor to be present every Friday and Saturday.

V. *Most Useful Line of My Work.*—Thus far the most useful line has been that of the Day Schools, and so interested are the farmers in these classes that I have good reasons to believe that a serious complaint will go into the Department if they are discontinued.

I anticipate very much along the lines of my experiments this summer. The Day Schools and the Experimental Plots can afford plenty of work for one man without the office or the school.

VI. *Suggestions for the Future.*—The correspondence with the local papers, with farm periodicals, with enquiries, and with the Department is such as to take too much time from other work. If I were supplied with a stenographer for at least part of the time it would facilitate matters greatly.

I found it absolutely necessary to have a caretaker to keep the office open in my absence, and engaged one in December. I would suggest that a boy or girl be engaged to do my typewriting, and to keep the office open, or else that a stenographer be engaged for part time and the present caretaker be continued.

If a class be organized in the Collegiate Institute next year, one of two things must happen. Either the Day Schools must discontinue or a second man must be engaged. Then, too, one county is sufficient field for this man to work in. I have endeavored to cover the three united counties of Stormont, Dundas, and Glengarry, in order to acquaint the County Councillors with my work; and four schools in Stormont and three in Glengarry are the most I can possibly do outside of Dundas, and then Dundas is poorly served. Once over the ground in Stormont and Glengarry does not impress the importance of the work either upon the Councillors or the people as a repetition necessarily must do.

The Day School, or Day Institute, or whatever you may choose to call it, is the only means by which the farmer can be reached. Labor is scarce and if the meetings continue for two days in one place some farmers must necessarily remain away for one of the days; whereas, if a meeting, including an afternoon and an evening, be held in every representative centre, every farmer throughout the whole county can easily attend.

Report of R. E. Mortimer, B.S.A., Collingwood.

On the whole I think the townspeople received me well and the local papers gave me privileges to write articles relating to the new work, which I certainly took advantage of.

In the school there was no room that might be set apart for the Agricultural Department exclusively; so we held our classes sometimes in the Science Laboratory, sometimes in a small room off the hall called the Teachers' Room, and again in another room when it happened not to be occupied by its proper class. We expect soon to have a permanent abode on the top floor of the Collegiate Institute. In the first term we had one student, and in the second term, two.

We have rented a plot of ground, almost an acre, which is quite representative of the soil in the neighborhood,—a sandy loam. I have already drawn out a plan of the plots and have had the boys make copies of the plan; so that we can all keep good records of the experiments conducted. I have applied to the Experimental Union for a number of experiments in grains, fruits, and roots, and I will have some tests of fertilizers as well.

I had thought of conducting a short course in grain, seed, and stock, judging at some place other than Collingwood, but we have had such a stormy winter that I now feel pleased that we did not attempt it. We are now arranging for a two-day series of lectures in poultry and floriculture, with Messrs. Graham and Hunt of the College as the outside assistance. I think by means of these short courses, in whatever subjects may be best suited for the time being, we can give to the department here something that will be as an impetus to make it known, not only in this town and in this township, but all over the county, and even over the entire province.

After schools close for the summer vacation, I should like to spend the greater part of my time in travelling over this and adjoining counties to get acquainted with local conditions and bring the idea home to every farmer, showing him where he can benefit, as well as his sons, who may be privileged to take a course with us.

Report of F. C. Hart, B.S.A., Galt, Ont.

When the course in agriculture was started in the Galt Collegiate Institute there were eight pupils in the class. Five of these were boys from the town and entered the class without solicitation, three coming without any particular reason that I could learn, and the others mainly for poultry or entomology. The three dropped out at Christmas, as they had no intention of following agriculture. Three boys in the class are farmers' sons, two taking the full Collegiate course with agriculture, and one taking agriculture only.

In our studies in the class we have not followed closely the course as laid down, but have tried to make it as useful as possible to the boys in the class. The work so far has been with poultry and entomology, some dairying with lessons on the care and handling of milk and the use of the hand separator; (one of these machines has been lent by a manufacturing firm); practice in testing milks with the Babcock test has also been given; in Horticulture we have studied a few principles with experiments, such as for example, the proper mixing of Bordeaux Mixture and other sprays; surveying the experimental grounds with the chain, plotting on paper, and discussing treatment and planning experiments for the same; getting acquainted with the different types of farm animals and crops; experiments with soils and studying soils in their relation to water; judging seed and getting acquainted with weed seeds, have been part of the work. The pupils are required occasionally to write essays on some particular subject in which they are interested. One hour each week is spent in the reading-room getting acquainted with current up-to-date literature in the farming papers.

Occasionally the class has visited some local farmer or poultryman. The boys are also preparing, together with other pupils in the school, for a School Fall Fair, consisting of exhibits by the pupils in the science, manual training, domestic science, agriculture, and other departments.

The school is furnished with an excellent manual training department, and the agriculture pupils when in this class have been given models and work applicable to our course.

Outside the school the work has included getting acquainted with the farmers, officers of the various agricultural societies, rural school teachers, etc. During the fall the office and reading room were opened on Main St. and the fact advertised in many ways. This reading room has been used to some extent by the farmers and is supplying a want. It is used as much by the townspeople, especially those interested in poultry and horticulture. Young men come in during the evenings and especially on Saturdays, and in this way I have made many acquaintances. The room is being used to a greater extent than at first. The Agricultural Society, Poultry Association, Horticultural Society, and Dairymen's Association, use it as a board room, and the regular meetings are held here. In this way I can keep in touch with these and assist where I can.

The advantage of having some one locally to whom to apply for information or help is also being recognized and used to a greater extent by the farmers. People about town also, having gardens or fruit trees, and the poultrymen frequently come to the office for suggestions or information.

A good deal of time is spent however, and was especially last fall, in visiting individual farmers in the county and at the various markets. By conversation in this way in the field, orchard or barn, besides learning something myself as to local conditions and so forth, I have been able to be of some help. It does not seem much in itself, but I believe in this quiet way, a good deal has been done. I have also made it a point to become acquainted with the rural school teachers. I think valuable work is done in visiting the rural schools, giving the children a few interesting lessons, and awakening there an interest in the possibilities of the parents' business.

Of course all the fall fairs were visited in the district and literature distributed. At the Galt Fall Fair we had an Educational Exhibit. I also acted as judge at the Horticultural Show. The local grocers have aided materially in the distribution of bulletins where they would do the most good.

Considerable efforts have been made to awaken an interest in the value of testing the dairy cows of those supplying milk to the town or sending cream to Toronto. To this end I have been doing considerable testing myself both for individual farmers and for milkmen supplying the town of Galt. This matter is receiving attention in other parts of the county also.

From the first the townspeople have taken an interest and have been of material help. The Parks Committee gave the free use of nearly an acre of ground in the Agricultural Fair grounds so that our experiments here will be an important educational feature of the fall fairs. The townspeople have also taken advantage of the department, the Board of Health asking for regular testing of milk delivered to the town, the Town Beautifying Club asking for an address, etc.

The local press have been very free in allowing the use of their columns in giving publicity to the Department. Articles on timely subjects that I have prepared have been readily received and given prominence both in the daily and weekly editions. Not only the Galt papers but the others over the county have been generous in this regard.

Some local meetings have been held, and I have been present at and delivered addresses at all or nearly all the Farmers' Institute meetings in

the county. In these addresses, among other things, I have advocated the formation of Farmers' Institute Clubs, and as a result we are likely to organize many of these over the county in the near future. Especially have I endeavored to interest the young men in this and I believe it is in extension work of this kind that the greatest good can be done in this country. We are near the short courses held at Guelph and such courses here would not be to the best advantage. But by the introduction of such clubs, the interest in agricultural education can be kept up the year round, and the agricultural interests organized; the opportunity is at hand to discuss questions of local interest as they arise, and thoughtfulness induced always. At present there is a strong agitation to have a larger representation of farmers in Parliament, but as a class, because of lack of opportunities, farmers are perhaps lacking in ability to voice their sentiments even in a small meeting. Practice in these clubs will give young men, on whom the future depends, not only a wider and more thorough knowledge of their business, but will fit them also to supply the present lack of men adequately fitted to represent the great industry in Parliament.

Two of these clubs are already organized in the county. And so, as far as I can see at present, the work shapes itself towards the organization of farming interests in local centres; of organizing co-operation in every district, in marketing, in using pure stock in either dairying or beef, and in fighting diseases and insects, etc. Farming in this county is already at a high standard, the greatest lack being that of organization and co-operation, and easily obtainable agricultural educational facilities in the rural districts.

With regard to the outlook in the school, the growth of the class here is necessarily slow. But by interesting the teachers and pupils in the rural schools in the way I have indicated, and especially the entrance pupils, its importance is being recognized more and more, and already there are prospects of a larger class next year.

Facilities for class-room work in the school at present are not of the best, but the school authorities are providing to their best ability under the circumstances and by spring we shall have a room suitably furnished for the work.

So far nothing extraordinary has been attempted, but we believe we are laying a firm foundation and getting a thorough grasp of the situation. We are greatly encouraged by the steady progress and by the reception the work is receiving from the farming community.

Report of A. McKenney, B.S.A., Essex.

Our work in the County of Essex, as representative of the Department of Agriculture and as specialist in agriculture in Essex High School, has, I think, been reasonably successful.

The townspeople from the beginning were anxious for the success of the movement and gave us every possible assistance.

The county council supported the work with a liberal grant.

The farmers themselves, whom we were most anxious to meet, were somewhat indifferent. This was, however, entirely due to the fact that they did not thoroughly understand the work which we were trying to do. And in this county at least, I think we made the mistake of getting the cart before the horse, in undertaking to start a class in agriculture before the people understood what we were intended to teach. We, however, got started with a small class and those who are taking the work express them-

selves as being well satisfied with it and have signified their intention of going on.

This year the greater part of our work has been in connection with the Department of Agriculture; in fact the work outside has assumed such proportions as to require the entire attention of one man.

The County of Essex affords great opportunities for extension work among the farmers themselves, and in order to carry on the work in the school and in the country, as it should be carried on, two men are a necessity, one to look after the outside work and attend to the organization of the high school classes, and the other to look after the classes during school hours.

Perhaps it would be well to give just here a brief outline of the work which we have been doing and intend doing throughout the country:

(1) We have held several orchard demonstrations in spraying for San José Scale. These were well attended.

(2) A short course in stock and grain judging was held, with an attendance of 60.

(3) A short course in fruit and vegetable growing was held, with an attendance of 150.

(4) We have assisted in organizing seven Farmers' Clubs and one Poultry Association.

(5) We have also attended all the Farmers' Intsitute meetings in the county. At these we conducted several judging classes, which were appreciated and well attended.

(6) It is also our intention to conduct experiments with tobacco and fertilizers during the coming season.

The work outlined above, along with attending Farmers' Club meetings, writing articles for the paper, answering questions, and work of that kind in the office, will give you a fair idea of our work as representative of the Department of Agriculture. It is hard to say which of the two different phases of the work is the more important; but I think the success of the work of teaching agriculture in the high school depends almost entirely upon the success of the extension work in the county. But it is impossible for one man alone to manage them both and make them the successes which they should be.

Summary and Conclusions.

(1) As might have been expected, only a beginning has been made in the classes in agriculture in the high schools. The attendance is not large but it is as large as was expected.

(2) Where there are farm boys in the classes, the work is progressing most satisfactorily.

(3) The work of the office and in the county is increasing every month, and the services of the specialist are in great demand by the farmers for miles around.

(4) The holding of short courses for farmers and farmers' sons has proved most popular.

(5) The holding of one-day judging schools in blacksmith shops and other convenient places has stimulated an interest in stock raising and has provoked a good deal of discussion, leading to correspondence with the agricultural specialist and will, we believe, be for the betterment of our farms and farming conditions.

(6) As the work progresses the members of the county councils are becoming interested and already grants have been made to help meet expenses.

(7) The interest and enthusiasm manifested by the townspeople in the work of the office, the short courses, the formation of farmers' clubs, etc., is most marked. The merchants and professional men in these towns, as they see the possibilities of the work, begin to realize the value of the work to the towns themselves. A prosperous farming community makes prosperous settlements.

(8) The county school inspectors are already interesting themselves in the new movement and are, where practicable, availing themselves of the opportunity of using the agricultural specialist to help in the problems of rural school education. This may be done by the introduction of school gardens with experimental plots, the actual instruction in the schools of such practical subjects as seed judging, weed identification, seed germination, milk testing, and so forth.

(9) The rural teachers who are anxious to help their pupils to better things are also consulting these agricultural specialists about school gardens, co-operative experiments in agriculture, and other things that might assist in making the school curriculum of more practical benefit to the country boy and girl.

(10) Farmers' Clubs are being formed, with the office of the specialist as a meeting place. Here better methods of farming are discussed in a general way and in detail. Ideas are exchanged and criticised; seasonable topics are introduced, and men with a special message are from time to time invited to address the meetings.

(11) Finally, my inspection has convined me that the townspeople are already enthusiastic and confident of the success of the scheme. The country people are interested and willing to give the scheme a thorough trial. The country people will have to be thoroughly convinced of the practical benefits to be derived before they will enthuse over the agricultural courses in the high schools. This conviction will be brought home to them as the agricultural specialist is given opportunity and avails himself of it, to go out continually into the country, visiting the farmers on their own farms, suggesting improvements in farm methods, that can readily be carried out, suggesting remedies for injurious insects, and means for the extermination of noxious weeds, etc., until the farmers themselves see the possibilities in an agricultural education for their sons. Then we may look for larger agricultural classes in our county high schools.

GEO. C. CREELMAN.

March 19th, 1908.

ANNUAL

Archæological Report,

1907.

BEING PART OF

Appendix to the Report of the Minister of Education, Ontario.

PRINTED BY ORDER OF
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TORONTO.

PRESENTATION.

To the Honourable R. A. Pyne, M.D., M.P.P.,
Minister of Education for Ontario.

Sir,

I have much pleasure in presenting you with the Archæological Report for 1907. The delay has been wholly on account of the press of office work, but hereafter it will be necessary to begin the preparation of the statements much earlier than usual.

The total number of specimens at the close of 1907 in this section of the museum was 27,991—it is now 28,717. The increase of 1907 over 1906 was 588.

I have the honour to be,

Yours respectfully,

DAVID BOYLE.

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ADDITIONS TO THE MUSEUM.

1907.

27,991 Incised stone resembling a small axe. It bears marks like Masonic emblems and is probably modern. Lot 25, Con. 12, East Nissouri tp., C. N. Mitchell.
27,992 Arrow head, near Lakeside, Ont., C. N. Mitchell.
27,993 Chert knife or scraper, near Lakeside, Ont., C. N. Mitchell.
27,994 Spear or knife, near Lakeside, Ont., C. N. Mitchell.
27,995 Arrow or spear, Near Lakeside, Ont., C. N. Mitchell.
27,996 Spear head, weathered, near Lakeside, Ont., C. N. Mitchell.
27,997 Awl or perforator, near Lakeside, Ont., C. N. Mitchell.
27,998 Scraper, near Lakeside, Ont., C. N. Mitchell.
27,999 Stem of clay pipe, near Lakeside, Ont., C. N. Mitchell.
28,000 Chert reject, near Lakeside, Ont., C. N. Mitchell.
28,001 Fragment of ground axe, near Lakeside, Ont., C. N. Mitchell.

The following (from 28,002 to 28,176) were procured from G. C. Wright, Kingston.

28,002 Arrow head, Mo. State, U.S.A.
28,003 Arrow head, Mo. State., U.S.A.
28,004 Arrow head, Middlesex co., Ont.
28,005 Arrow head, Middlesex co., Ont.
28,006-11 Arrow head, Mo. State, U.S.A.
28,012-32 Arrow head, Middlesex co., Ont.
28,033-79 Arrow head Mo. State, U.S.A.
28,080-82 Arrow head, Middlesex co., Ont.
28,083-133 Arrow head, Mo. State, U.S.A.
28,134 Stone pipe, Wolfe Island, Ont.
28,135 Stone pipe, Strain's Farm, Amherst Island, Ont.
28,136 Clay pipe, Wolfe Island, Ont.
28,137 Clay pipe, Wolfe Island, Ont.
28,138 Stone pipe, Mo. State, U.S.A.
28,139 Clay pipe, Mo. State, U.S.A.
28,140 Clay pipe, Mo. State, U.S.A.
28,141 Catlinite pipe, Peigan res., N.W.T.
28,142-44 Catlinite pipe, Blood res., N.W.T.
28,145 Stone pipe, Blood res., N.W.T.
28,146 Catlinite pipe (squaw pipe), Peigan res., N.W.T.
28,147 Stone war club, Blood res., N.W.T.
28,148 Native copper pendants and beads (taken from skeleton seven feet long ?), Pittsburg tp., Ont.
28,149-158 Stone adze, Middlesex co., Ont.
28,159 Gouge, Wolfe Island, Ont.
28,160 Gouge, Kerr farm, Amherst Island, Ont.
28,161 Fragments of pottery, Middlesex co., Ont.
28,162 Stone hammer, Middlesex co., Ont.

28,163 Stone tomahawk, Mo. State, U.S.A.
28,164 Stone war club, Blood res., N.W.T.
28,165 Woman's knife (slate), Wolfe Island, Ont.
28,166 Elk horn hide scraper, Blood res, N.W.T.
28,167 Squaw saddle, Blood res., N.W.T.
28,168 Pemmican bag, Peigan res., N.W.T.
28,169 Squaw scabbard (beaded), Blood res., N.W.T.
28,170 Skull, Chief Mountain, Alta.
28,171 Thigh bone, Chief Mountain, Alta.
28,172 Thigh bone, Chief Mountain, Alta.
28,173 Bead Pouch, Peigan res., N.W.T.
28,174 Short stone axe for inserting in handle, Middlesex co., Ont.
28,175 Stone adze, Middlesex co., Ont.
28,176 Native copper bracelets (26), Pittsburg tp., Ont.

The following (from 28,177 to 28,195) gift of S. Dillon Mills.

28,177 Red clay bowl, Costa Rica, C.A.
28,178 Red clay handled jug, Costa Rica, C.A.
28,179 Red clay vessel, Costa Rica, C.A.
28,180 Small red clay olla, Costa Rica, C.A.
28,181-87 Small red clay vessel, Costa Rica, C.A.
28,188 Small engraved cup gourd. "
28,189 Cup made from kelp bladder. "
28,190 Small engraved cup, gourd. "
28,191 Small engraved cup, gourd. "
28,192 Small metate (upper and lower stones), Costa Rica, C.A.
28,193 Small bag (sisal fibre). "
28,195 Fragments of pottery, river shells and small bones from mound on road from Coboconk to Norland, Ont.

The following collection was procured from Rev. Dr. R. W. Large, British Columbia: (28,196 to 28,256).

28,196 Cedar bark mat, near Bella Bella.
28,197 Cedar bark mat, " "
28,198 Cedar bark mat, " "
28,199 Totem pole, " "
28,200 Old time spear, " "
28,201 Cedar bark basket, " "
28,202 Cedar bark basket, " "
28,203 Basket (birch bark), " "
28,204 Head dress (cedar bark), near Bella Bella.
28,205 Ceremonial wand, " "
28,206 Stone hammer, " "
28,207 Halibut sinker, " "
28,208 Halibut sinker, " "
28,209 Old time halibut hook, " "
28,210 Old time halibut hook, " "
28,211 Halibut hook, " "
28,212 Cod hook, " "
28,213 Cod hook, " "
28,214 Iron hook, " "

28,215-20 Dance whistles, near Bella Bella.
28,221 Dance whistle, " "
28,222 Dance clapper, " "
28,223 Dance Clapper, " "
28,224 Canoe awl, " "
28,225-29 Gambling stones, " "
28,230 Gambling disc, " "
28,231 Gambling disc, " "
28,232 Gambling disc, " "
28,233 Crow ornament (slate), " "
28,234 Seal ornament (stone), " "
28,235 Fragment of stone hunting knife, near Bella Bella.
28,236-44 Stone axe or chisel, " "
28,245 Paint stone, " "
28,246 Mat beater (bone of whale), " "
28,247 Gambling disc, near Bella Bella.
28,248 Bone chisel, " "
28,249 Small pipe, " "
28,250-54 Sea lion teeth, " "
28,255 Wolf's or dog's left under jaw, showing united fracture.
28,256 Eagle's head (carved in baryte, heavy spar).
28,257 Wooden club, Mrs. Alfred Willson.
28,258 Stone head war club, Mrs. Alfred Willson.
28,260 Buckskin tobacco pouch, ornamented with beadwork and porcupine quills, Mrs. Alfred Wilson.
28,261 Child's plaything, attached to the cradle, Ojibway indians, Edmund Morris.
28,262 Woman's slate knife, lot 1, con. 2, Toronto tp., Alfred Adamson.
28,263 Chert knife, lot 1, con. 2, Toronto tp., Alfred Adamson.
28,264 Stone axe, lot 1, con. 2, Toronto tp., Alfred Adamson.
28,265 Stone axe, semi-gouge, lot 1, con. 2, Toronto tp., Alfred Adamson.
28,266 Bead necklace, Blood Indians, N.W.T., Thomas Green, Ed. Dept
28,267 Glass and shell beads, Lambton Golf Links, Mr. Wallace.
28,268 Stone hammer, collected by H. W. Brown, Warner, Brown & Co., S. Dakota, gift of J. W. Wintenburg.
28,269 Charred Indian-corn, found in a mound in the London district, over which pine trees of a large size had grown and decayed.

Numbers 28,270–28,286 presented by C. N. Mitchell.

28,270 Piece of pottery, lot 25, con. 12, East Nissouri tp.
28,271 Two pieces of pottery, lot 25, con. 12, East Nissouri tp.
28,272 Spear heads, lot 25, con. 12, East Nissouri tp.
28,273-77 Arrow head, lot 25, con. 12, East Nissouri tp.
28,278 Scraper, lot 25, con. 12, East Nissouri tp.
28,279 Scraper, lot 25, con. 12, East Nissouri tp.
28,280 Awl or perforator, lot 25, con. 12, East Nissouri tp.
28,281 Awl or perforator, lot 25, con. 12, East Nissouri tp.
28,282-6 Flints, lot 25, con. 12, East Nissouri tp.

Numbers 28,287-28,291 presented by Mr. Moody.

28,287 Small axe, weathered, lot 35, con. 2, Trafalgar tp.
28,288 Spear head (gneiss), lot 35, con. 2, Trafalgar tp.
28,289 Arrow head, lot 35, con. 2, Trafalgar tp.
28,290 Arrow head, lot 35, con. 2, Trafalgar tp.
28,291 13 Flints, lot 35, con. 2, Trafalgar tp.
28,292 Little pemmican bag, Long Lake, Thunder Bay District, Edmund Morris.
28,293 Loom, with web of pandanus leaf, fibre cloth. Santa Cruz Islands, north of New Hebrides, S. Pacific. Gift of Rev. Jos. Annand.
28,294 Modern pottery, Mexico, Mrs. De Ganahl, 189 Bloor street W.
28,295 Modern pottery, Mexico, Mrs. De Ganahl, 189 Bloor street W.
28,296 *Walrus tusk, John Small, Esq., Berkeley House, Toronto.
28,297 *Walrus tusk, John Small, Esq., Berkeley House, Toronto.
Nos. 28,296-7 presented to Mr. Small by Lieut. Smithe of the R. Navy. He procured them when on an expedition to the Arctic regions about 25 years ago.
28,298 Copper tool. Gravel pit near Nepigon, Ont. Wm. McKirdy.
28,299 Stone axe. Williamsburg tp. A. L. Castleman.
28,300 *Lizard and Tarantula. Bartle, Cuba. Collected by Geo. Johnson. Presented by Archibald Hope.
28,301 Vertebrae of the thresher whale. Hon. Geo. A. Cox.
28,302 Vertebrae of the thresher whale. Hon. Geo. A. Cox.
28,303 Vertebrae of the thresher whale. Hon. Geo. A. Cox.
28,304-6 Three skulls and other human bones. From shallow grave on the farm of Mr. Tyer, near Islington, Etobicoke tp., York co.
28,307 Frame for drying nets, etc. Rev. Dr. R. W. Large, B.C.
28,308 Cree bead sash. Purchased by Mrs. J. H. C. Durham at the John Smith Indian Reserve, Sask. Gift of Mrs. J. H. C. Durham, 93 Elm avenue, Rosedale.
28,310 Foot shaped or pipe-head shaped stone. Mrs. Hutton, Winnipeg.
28,311 Photo of Peruvian pottery (3 pieces). C. G. Scott, Seward, Ill., U. S.
28,312 Spindle whorl, Canisby, Caithness, Scotland. Miss Em. D. Nicolson.
28,313 Spindle whorl, Canisby, Caithness, Scotland. Miss Em. D. Nicolson.
28,314-28,385 Flints. Ozark quarry on the Indian Reservation, near Seneca, Mo., U. S. A. In various stages of manufacture as arrow heads, heavy weapons and tools of various kinds. These specimens are instructive by way of showing the results of rude chippings to produce desired shapes. Some have proved failures. It is undoubted that the chipping or flaking is of artificial origin. By exchange with Dr. W. C. Barnard.
28,386 †Cast. The original of the large lance, spear, or dagger head, was very black glossy chert, and a beautiful implement. About 1858 or 59, in grading a street in Grand Rapids, Mich., it became necessary to remove an Indian mound, and this implement was picked up from the dump. It is, therefore, not known what position it occupied, or its relation to other remains, and there is no information as to the structure or dimensions of the mound. This implement was in a small collection belonging to Mr. Alfred Hawkins, Twinsburg, Summit co., Ohio.

*These and a few others will be transferred to another list.
†Numbers 28,386 to 28,390 presented by N. A. Chapman, Cleveland, Ohio.

28,387 Cast. The original of the small sickle shaped scraper is a surface find picked up in a plowed field in Hudson, Summit co., Ohio, in 1885 and now in the collection belonging to Dr. T. G. Griste, Twinsburg, Summit co., Ohio.

28,388 Cast. The original of the Turtle cast was found in a plowed field on the Samuel McElroy farm near a spring and not far from the Cuyahoga river in the n.w. part of Northfield, Summit co., Ohio, about 1876, by Mrs. Andy Small.

28,389 Cast. The original of the bird ornament with perforated base was found in a plowed field near the Cuyahoga river in the north part of Boston, Summit co., Ohio, about 1871, and it is now in the collection of Dr. T. G. Griste, Twinsburg, Summit co., Ohio.

28,390 Cast. The original of the ceremonial axe or butterfly ornament was found in a plowed field on the Wells Farm, corner of Twinsburg, Summit co., Ohio, and Bedford, Cuyahoga co., Ohio, about 1863. The material is banded or novaculite slate. The piece that is gone near the end was broken off when found.

Numbers 28,391 to 28,402 presented by H. A. Van Winckel, Dec. 30, 1907.

28,391 Clay pot, mound in Ohio.
28,392 Axe, southern Indiana, U.S.A.
28,393 Gorget, Indiana, U.S.A.
28,394 Stone axe, W. Va., U.S.A.
28,395 Stone axe, Mich., U.S.A.
28,396 Stone axe, Franklin co., Kentucky, U.S.A.
28,397 Stone axe, Ohio, U.S.A.
28,398 Pendant, Niagara, Penn., U.S.A.
28,399 Stone chisel, Kingston, Ont.
28,400 Copper adze, Pittsburg, Ont.
28,401 Stone pipe, Manitoba.
28,402 Clay pipe, Manitoba.

28,404 Plaster cast mask. French name, Katherin Gros-Louis; Indian name, ; Tribe, Huron; Blood, one-eighth white; Reserve, Loretto; Probable age, 30; Height, 5 ft. 4 ins. August, 1906.

28,405 Plaster cast mask. French name, Young Man; Indian name, not known; Huron; Blood, one-quarter white; Reserve, Loretto; Probable age, 19; Height, 5 ft. 7 ins. August, 1906.

28,406 Plaster cast mask. English name, Thomas Williams; Indian name, Atouwa; Tribe, Mohawk; Blood, one-half white; Reserve, Caughnawaga; Prabable age, 55; Height, 6 ft. 1 in. August, 1906.

28,407 Plaster cast mask. French name, Mrs. La Salle; Indian name, Kainentison; Tribe, Mohawk; Blood, one-quarter white; Reserve, Caughnawaga; Probable age, 45; Height, 5 ft. 4 ins. August, 1906.

28,408 Plaster cast mask. French name, Louis Beauvier: Indian name, Awennatekha; Tribe, Iroquois; Blood, one-quarter white: Reserve, Caughnawaga; Probable age, 12; Height, 4 ft. 8 ins. August, 1906.

28,409 Plaster cast mask. English name, Mrs. Mitchell Cold; Indian name, Serik Koesaki; Blood, one-quarter white; Reserve, Oka; Probable age, 68; Height, 5 ft. 2 ins. August, 1906.

28,410 Plaster cast mask. French name, Abraham La Favre; Indian name, Latagarate; Iroquois; Blood, one-quarter white; Reserve, Oka; Probable age, 60; Height, 5 ft. 6 ins. August, 1906.

28,411 Plaster cast mask. English name, John Isaacs; Indian name, Watiasawiasekawa; Iroquois; Blood, full; Reserve, St. Regis; Height, 5 ft. 5 ins. August, 1906.

28,412 Plaster cast mask. People, Igorottes; Locality, Bontoc, n.w. of Isle of Luzon; Name, Laidis; Age, 18; Weight, 135 lbs.; Height, 60 ins.; Chest, 35 ins.; Head, 21½ ins.; Arm, 60 ins. August, 1907.

28,413 Plaster cast mask. People, Igorottes; Locality, Bontoc, n.w. of Isle of Luzon; Name, Casma; Age, 30; Weight, 120 lbs.; Height, 55 ins.; Chest, 31½ ins.; Head, 24¼ ins.; Arm, 58 ins. August, 1907.

28,414 Plaster cast mask. Igorotte, young woman.

28,415 Plaster cast mask. Igorotte, small boy.

The plaster masks were made from life by Mr. Gordon V. Usborne, of Toronto, when the Igorottes were on exhibition at the Fair, in 1907.

Numbers 28,416 to 28,573 presented by Mrs. Alfred Willson.

28,416 Iron tomahawk. Beverly Tp., Wentworth Co., Ont.
28,417 Adze, Bosanquet Tp., Lambton Co., Ont.
28,418 Axe, Bosanquet Tp., " " "
28,419 Adze, Bosanquet Tp., " " "
28,420 Adze, Bosanquet Tp., " " "
28,421 Adze, Bosanquet Tp., " " "
28,422 Axe, Bosanquet Tp., " " "
28,423 Axe, Ont., Bosanquet Tp.
28,424 Axe, Stephen Tp., Huron Co., Ont.
28,425 Axe, Stephen Tp.,
28,426 Adze, Stephen Tp.,
28,427 Adze, Ont. " " "
28,428 Axe, Stephen Tp. " " "
28,429 Polishing or rubbing stone, Lot 5, Con. 6, Bosanquet Township.
28,430 Adze, Bosanquet Tp.
28,431 Axe, Stephen Tp., Ont.
28,432 Axe, Stephen Tp., Ont.
28,433 Axe, Ont.
28,434 Axe, Ont.
28,435 Chisel, Ont.
28,436 Chisel, Ont.
28,437 Chisel, Ont.
28,438 Axe, Bosanquet Tp., Lambton Co., Ont.
28,438½ Stone sinker, Ont.
28,439 Bone found on Lot 33, L. R. W. Bosanquet Tp., 50 feet east of river and 17 ft. below the surface, April, 1874.
28,440 Bone awl, Nottawasaga Tp., Ont.
28,441 Bone awl, Nottawasaga Tp., Ont.

28,442 Fragments of Pottery (6 pieces), Nottawasaga Tp.
28,443 Fragments of Pottery (12 pieces), Grand Bend, Bosanquet Tp.
28,444 Arrowhead, Tenn., U.S.A.
28,445 Arrowhead, Tenn., U.S.A.
28,446 Arrowhead, Georgia.
28,447 Arrowhead, Georgia.
28,448 Arrowhead, Virginia.
28,449 Arrowhead, Nottawasaga Tp.
28,450 Arrowhead, Nottawasaga Tp.
28,451 Arrowhead, Nottawasaga Tp.
28,452 Arrowhead, Nottawasaga Tp.
28,453 Scalping knife (?), Nottawasaga Tp.
28,454 Arrowhead, Bosanquet Tp.
28,455 Arrowhead, Bosanquet Tp.
28,456 Arrowhead, Bosanquet Tp.
28,457 Arrowhead, Bosanquet Tp.
28,458 Arrowhead, Bosanquet Tp.
28,459-66 Arrowhead, Stephen Tp.
28,467 Scrapers or stunners, Stephen Tp.
28,468 Scrapers or stunners, Stephen Tp.
28,469 Drills?
28,470 Drills?
28,471-28,522 Arrowheads, Bosanquet Tp.
28,523-28,566 Flints, Bosanquet Tp.
28,567 Sailor's wooden tool (use unknown).
28,568-28,572 Clay pipe (Huron Iroquis) Nottawasaga Tp.
28,573 Clay pipe stem (Huron Iroquois) Nottawasaga Tp.

Numbers 28,574-28,578 purchased from Miss L. Augustus Bull, Weston.

28,574 Tear Jar, Damascus.
28,575 Tear Jar, Sidon.
28,576 Tear Jar, Sidon.
28,577 Tear Jar, Simasoll.
28,578 Tear Jar, Simasoll.

REVIEW.

It has been suggested that the "coming of age" of the Archæological section of the Provincial Museum would prove a fitting time to review its past and to observe where it stands to-day. In accordance with this suggestion the following notes are presented.

It may be premised that many years before the idea of forming the present collection took shape, at least one attempt had been made to bring together a Canadian collection of material to illustrate aboriginal life. The effort in question was, in all probability, made by Sir Sandford Fleming, in connection with the Canadian Institute, but it does not appear to have met with any large measure of success, either because of difficulty in bringing specimens together, or, that having been collected, they disappeared in various ways, for the want of case accommodation in the Institute's building.

There was nothing like too much enthusiasm shown among the members of the society in question when the last proposition was made to form even an apology for an archæological museum in Toronto. The only exception to this feeling was shown by Prof. W. H. Vander Smissen, who was president of the Institute that year—1886-7—and who exerted himself considerably in various ways to further the scheme, even to the extent of contributing some money to aid in the printing and mailing of a circular asking for contributions of specimens.*

In course of a short time, however, sufficient interest became aroused to warrant the appointment of a committee to solicit a small appropriation from the Provincial Legislature, because it should be remembered work had been proceeding in a quiet way for several years, the nucleus of the collected material having been formed by the gift of the curator's private material, consisting of some 900 odd specimens.

The committee referred to received a respectful hearing from the government in 1885, and succeeded in procuring a grant of $1,000 for the

*The following is a copy of the circular, and Sir Sandford Fleming some years afterwards, assured me that it was based on one he had issued, in connection with what has already been mentioned as the first attempt to direct general attention to matters archæological in this country.

"1. Is there any mound, tumulus, or intrenchment in your neighborhood?

2. Are there any elevations which, from their regularity or for any other reason suggest an artificial origin?

3. What are the dimensions and area of these from actual measurement? If possible, give a plan with sections.

4. What are the physical features of the situation and vicinity?

5. Are there any evidences of the place having been surrounded with posts or pickets?

6. Are there still, or were there before "clearing," trees of large size within the area of the work? If so, state kind and size, also number of annual growth-rings on largest stump.

7. Are stone or bone weapons of any kind, or fragments of pottery ploughed up in the neighbourhood?

8. Have any copper implements of native manufacture been discovered? What?

9. Have any iron or copper articles been found indicating intercourse with Europeans? What?

10. Are there any local names of Indian origin in your township or neighborhood? If so, kindly make a list of them, indicating their correct pronunciation, stating their meaning, and the local or traditionary circumstances from which they originate.

11. Names of township and county, and numbers of lot and concession in which any mound ossuary, intrenchment, old village site, or battle-ground exists.

12. Name of any local collector of Indian relics, or of any persons who are interested in Canadian Archæology."

ensuing year. For ten years this and succeeding annual appropriations were mainly—almost wholly—expended in travelling expenses, supply of cases, employment of men to dig, and freight or express charges, so that all office work had to be performed almost gratuitously, although on the assurance of the Honorable the Minister of Education it was originally intended that six hundred dollars of the grant was to be expended directly for the curator's services, but of which understanding no intimation ever reached his ears from the treasurer of the Canadian Institute, through which payment of the grant was made, purely for archæological purposes.

When the first report 1886-7 was issued, it contained an account of the first field work done as a result of the legislative appropriation, and the Canadian Institute availed itself of this opportunity to print free of cost, its own annual report as well as sub-reports from the biological, architectural, photographic, philological and geological sections, although the only connection that ever existed between the archæological work and this society consisted in the fact that the latter kindly consented to permit the use of its attic space to accommodate the archæological cases ; this was all, yet after the removal of the specimens to the Education Department, the Legislature was good enough to acknowledge a claim for an increased annual grant to the society, on the plea that the removal of the museum to its present quarters in the Education Department buildings was a loss to the Institute. This explanation is necessary to show why the Reports of the Canadian Institute appeared for some years as part of the archæological Reports, and thus led to a confusion which yet exists to some extent.

In the first report reference was made to an examination of some ground on the rear of lot 2, con. 1, West York township, and to gifts of numerous specimens from that neighbourhood by the late B. Jackes, of Toronto, by Mr. W. G. Long, an enthusiastic amateur archæologist, of Lansing, near by, and by Miss Marshall, the local school teacher.

It was also recorded that on the invitation of Mr. C. A. See, of Gananoque, his property on Tidd's Island in the St. Lawrence River had been searched by the curator for Indian material, with permission to appropriate for museum purposes all that might be found. Similar privileges were accorded by Messrs. Louis Bedard and Laurence O'Neil so far as their portion of the island was concerned, with the result that a number of very good specimens were added to the Museum.

Mr. C. A. See was also generous in presenting us with all the material he had picked up in the course of his own work on a mound at the western end of Tidd's Island.

During this season too, the site of an ancient palisaded fort was examined on the farm of Mr. Wm. Gilbert, lot 26, con. 8, Beverly township, Wentworth county, under the guidance of Mr. Wallace McDonald, the well known clerk of the township. On the assurance of Mr. McDonald that close by at least 300 iron tomahawks had been turned up by the plough, the conclusion was reached that the site was connected with some French expedition from Quebec to what was then the "far west." In addition to the valuable assistance rendered on this occasion by Mr. McDonald, much aid came from the late Miss Robertson, from Mr. and Mrs. Gilbert, owners of the property, from Mr. Joseph A. Smith, P. S. I. for the county, and more than all from Mr. James Dwyer and Mrs. Dwyer, on whose farm an ossuary yielded very richly. Mr. and Mrs. Dwyer also presented the whole of their own collection.

Shortly after this a visit was made to Humberstone township, on Lake Erie, where an ossuary was reported by Miss Emma Crosson. This ossuary was quite unique as to position, lying as it did on *low land*, surrounded by sand hills from 20 to 30 ft. high. A good many skulls were taken from this communal grave. Mr. Cyrenius Bearse, a highly intelligent and successful farmer, was more than kind. He and Mrs. Bearse did everything possible to assist in the work. From Mr. Bearse on this occasion we received our first piece of whole pottery, which was taken from a sandhill on the shore of Lake Erie.

Some time was spent this year also on the Baby estate at Lambton, York county, where there had been a long established early trading-post at the southern entrance to the Huronian (Humber) trail.

In June of the same year—1886—Nottawasaga in the heart of the Tionontate country, received a good deal of attention and the returns in archæological material were very good. Quite a number of village sites and ossuaries were examined, which through want of time on a former visit, had not even been seen. On this occassion much assistance was given by Mr. Robert Lougheed, and numerous excellent specimens were contributed by him, and by Mrs. Ed. Beecroft, Mrs. Adam, of Creemore, Mr. John Hannah and the Masters Connor, of Glen Huron.

The last named young men presented the Museum with gleanings of their father's fields for several years, and these finds were particularly rich in clay pipes, illustrative of Tobacco Nation life.

During the year, too, a visit was paid to the Six Nations Reserve in Tuscarora township, Brant county, in company with De-ka-non-ra-neh, who introduced me to chief Ska-na-wa-tih (the venerable John Buck), who displayed and explained for us the large stock of wampum strings and belts in his possession as Fire-keeper of his people—the Iroquois.

A supposedly artificial mound was examined near the village of Troy, and the conclusion arrived at was contrary to the supposition.

The township of Beverley proved an excellent "hunting ground" under the guidance of such gentlemen as Messrs. Wallace McDonald, James Dwyer, Jas. Rae, A. McKnight, and Rt. McQueen, Teacher, Kirkwall, who seemed to know every point of archæological interest in the neighborhood.

During this season also, a considerable number of specimens were added to the Museum from Nottawasaga, North Simcoe. Most of the Nottawasaga material came from the farm of Mr. Robert Lougheed, where there would appear to have been at one time not fewer than fifty lodges, and single habitations—a good sized village.

In 1887-8 when much of the Curator's time was spent in Cincinnati in connection with Ontario's first mineral display at the Ohio Valley Centennial Exposition, a considerable quantity of archæological material was procured by exchange for mineral specimens. In this way we added to our store, for comparative use, from North Carolina, Georgia, West Virginia, Tennessee, Mississippi, Alabama, Kentucky, Ohio, Indiana, Arkansas, and in less degree from a few other states.

In 1887-8 report, Dr. A. F. Chamberlain began a series of annual "Contributions towards a Bibliography of the Archæology of the Dominion of Canada and Newfoundland," and in these papers he succeeded in bringing together an admirable epitome of the writings on matters archæological relating to our country.

Among those who contributed in various ways, especially in the presentation of Indiana, Ohio and Kentucky specimens, were Drs. Craig

and Collins of Lawrenceburg, Ind. In company with these gentlemen, too, opportunity was given to visit several mounds and other earth works within easy reach of Cincinnati and Lawrenceburg.

About this time, too, Mr. James Dickson, Provincial Land Surveyor, Fenelon Falls, presented us with his own private collection, which, up to that time, was, perhaps, the most valuable gift of the kind the Museum had received.

In May of this year we purchased a small but very valuable collection from Dr. C. Dickson of Kingston, illustrative of aboriginal mechanism among the people who had inhabited the Thousand Islands. This collection included a good many copper specimens of various kinds.

From Dr. R. B. Orr, then of Maple, now of Toronto, we received some of the very best specimens in the Museum (especially of pottery) and ever since the same gentleman has remained "a friend indeed."

Mr. William Matheson of Lucan, had been for several years bringing together a private collection of archæological material from Middlesex and portions of adjoining counties—Huron, Perth, Oxford—and this collection was purchased from him.

The Rev. Th. Laboureau of Penetanguishene, presented some specimens illustrative of the French period among the Hurons, and W. Ransom, Esq., an English gentleman, residing in Hitchin, Hertfordshire, donated through the late Mr. J. H. Pearce, a number of British and French paleoliths.

At the close of the Report for 1887-8 these words occur:—"The collection is beginning to assume a character such as to warrant the belief that in a few years the Province of Ontario will possess an Archæological Museum, which, if not what it might have been with an earlier start, will, at all events, go a long way towards placing us on an equal footing in this respect with other progressive nationalities."

It is now pleasing to be able to say that this condition has been realized to some extent, although much remains to be done, and it is extremely gratifying to know that the Minister of Education is fully in sympathy with the desire to form reference and study, ethnological collections, illustrative of Canadian aboriginal life, on a scale, not by any means of extravagant pretensions, but one worthy of our Province and its position in the Dominion.

In 1888-9 much time was given to a somewhat detailed examination of village sites, ossuaries, and single graves in Nottawasaga township—classic ground in the history of Canada.

It may be added here thatsince that time more work of a very valuable kind has been performed in the same district by Mr. A. F. Hunter of Barrie, and more recently still by the Rev. A. E. Jones, S.J., of St. Mary's College, Montreal. Father Jones has devoted much study to the allocation of sites mentioned in the Jesuit Relations and has arrived at conclusions differing in several important respects from those reached by other students on the subject. He is, without doubt, the best living authority on Indian village sites in North Simcoe.

As the result of information supplied by Mr. Thomas Boon of Bothwell, I spent several days on the embanked village site near the village of Clearville, Kent county, where, with the assistance of Mr. Boon and the proprietors of the property, Messrs. Ridly and Bury, much good work was accomplished, and numerous additions made to the Museum.

Shortly afterwards a little attention was devoted to a mound at Port Colborne, where several whole pieces of pottery had been found with a number of skulls, but these were all taken away to the United States, by the finders.

More recently (in fact only last year) we acquired from the same place several skulls, and an excellent specimen of whole pottery (see Rep. 1906, p. 15).

Near the village of Maple, not far from Richmond Hill, an Indian village site was visited in company with Drs. R. B. Orr, and Noble of Maple, Wilson of Richmond Hill, Orr of Toronto, Watson of Sherwood, the Rev. Mr. Rutledge of Richmond Hill, and the Messrs. Smelser of Vaughan. A few days before this Dr. R. B. Orr had found here, the fragments of a large clay pot—the largest vessel of its kind ever found in the Province. Last year this was carefully restored and a cut of it will be seen at figures 1 and 2, p. 20, in this Report.

Not far away on lot 12, con. 3, Vaughan township, we opened an ossuary, and, with the consent of Mr. Keffer, the owner of the farm, examined it most thoroughly.

According to Dr. R. B. Orr's estimate this burial pit contained not fewer than eight hundred human skeletons, and from these we secured about eighty skulls, in good condition. No artificial material was found.

In 1890-1 we came into possession (first by loan, afterwards permanently) of three very good private collections, viz.: those of Messrs. W. G. Long, and George E. Laidlaw, and of Dr. Tweedale. The Long collection was made within a few miles of this city, the Laidlaw one near Balsam Lake, Victoria county, and the Tweedale collection, in the old Attiwandaron country, of which St. Thomas may be regarded as the centre.

Up to this time and working without any experience of an extensive kind, an attempt was made to separate our specimens into classes, beginning a new series of numbers with each class, but this confusing system was abandoned in 1890, when the present straight serial system was adopted.

During this year considerable work was done round Southwold Earthwork in Elgin county, Tuscarora and Oneida in Brant county; Balsam Lake (with Mr. G. E. Laidlaw) in Victoria county; Lake Weslemcoon (with Prof. A. F. Chamberlain, Ph. D.) in Addington county; Midland and the Old Fort at Ste. Marie, in Simcoe county; Parry Sound and Parry Island, in Parry Sound District, and Point Abino and Humberstone township, in Welland county. It will thus be seen that the districts formerly occupied by the Hurons and Attiwandarons were fairly well covered.

In the following year the extremely interesting and wholly unique earthwork at Southwold was again examined, as was another less remarkable in the township of Malahide not very far away. In Camden township Addington county, Dr. M. I. Beeman kindly acted as cicerone, and pointed out several remarkable, aboriginal, topographical features, as did Mr. Pub. School Inspector, Arthur Brown, in the township of Williamsburg, within a few miles of the town of Morrisburg.

Under the guidance of Dr. T. W. Beeman of Perth many localities were visited in Lanark county. On this occasion a large number of specimens were contributed (mainly through Dr. Beeman, by his intelligent band of co-workers in the Rideau Valley.)

In 1893 we made an exhibition at the Chicago World's Fair, and although this necessitated a prolonged absence of the curator from Ontario, it was the means of bringing him into touch with like-minded people from other parts of the world, especially of the United States, and thus numerous valuable exchanges were then either effected or arranged for.*

Among those who aided us most effectually during 1893 were Messrs. E. C. Waters of Brantford, Chief Dek-a-non-ra-neh of Ohswekin Reserve, and F. W. Waugh, Brantford, but our largest number of accessions came from the county of Lanark, where they were collected by our perennial and public-spirited friend, Dr. T. W. Beeman, Perth, assisted by the many collaborators whom he had succeeded in animating to a high pitch of enthusiasm.

It would not be easy to say whether, for voluntary contributions, involving the expenditure of much time and money, the Provincial Archaeological Museum owes more to him or to Lieut. G. E. Laidlaw of the Fort Ranch, Victoria county. Both gentlemen deserve more than ordinary credit for their patriotic efforts to make the Museum what it is, and it is no doubt gratifying to them to know that their generosity has not only proved so beneficial, but that it is so highly appreciated.

Another contributor this year whose name should not be forgotten, was Mr. W. G. Wright of Collingwood.

When attending the Chicago World's Fair, we acquired a good many specimens illustrative of primitive life in Illinois, Wisconsin, Ohio, Tennessee, New Mexico, and France. Here, too, for a small sum, we purchased the Niven (Aztec) collection, numbering some six hundred pieces. These yet form with the exception of the Mrs. Stewart material the only collection we have from Mexico, and are one of the most interesting of groups in our cases.

A few samples of Pueblo, Cliff-Dweller and New Mexican pottery also came into our possession, through Mr. Don Maguire, of Ogden.

In 1894 examinations were made of an earthwork a short distance north of Morrisburg, in Dundas county, and of another between the towns of Berlin and Waterloo in Waterloo county, in the latter case, with the assistance of Mr. Jacob Stroh, of Waterloo. Mr. Stroh is himself an ardent student of archaeology and possesses much information relating to his part of the county.

One of the most interesting localities in the province is to be found on the farm on lot 20, Con. 4, in London township, Middlesex county. On this occasion I was accompanied by Prof Wolverton of the Western University, who had on several occasions been over the ground, and who himself has brought together no small quantity of valuable material.

Still another earthwork was examined on lots 10 and 11 in Dorchester, Middlesex county. Rough surveys and drawings of both places were made, and appeared as illustrations in the annual report for the year.

At Mud Lake, on lot 15, Con. 11, Drummond township, a long bank that was thought to be of human origin proved to be a granite reef—an upheaval.

In Manvers township, Durham county, it came somewhat of a surprise to find ossuaries, considerably east of what had hitherto been regarded as Huron country. Here, however, the ossuaries were on low ground. In these were found numerous skulls, and a good many other human bones in a fair state of preservation, the limb bones lying in groups as they had been tied in bundles when the interment took place.

Information respecting another burial place of this kind came from Dr. McClinton, of Elmvale. This ossuary was lot 72, Con. 2, Flos town-

* The Institute used the legislative grant for 1902 to bind pamphlets!

ship, Simcoe county. Although the presence of iron, sheet-copper, and brass rings proved this burial-place to be of post-discovery origin, the bones were much decayed, but five good skulls were procured Here, too, were found specimens of the rare runtee form of wampum, or shell bead.

Dr. T. W. Beeman, of Perth, Lanark county, had frequently heard reports of certain graves along the banks of the Mississippi River, and that these were connected with the water front by means of narrow passages or tunnels formed of stone. We both spent a day in the search for these graves, but did not find them. A resident of the neighbourhood, who was supposed to know all about them, took us by canoe, and such a canoe! to show us where the graves were, but the places bore no resemblance to graves and the tunnels were invisible. The only suggestion of graves, was on one occasion when the frail, leaky craft looked like letting the three of us find places for our own bones in the bottom of the river.

The Massanog rock paintings were examined and copied during this season by Dr. Beeman and myself.

1898. The principal work of this year was a study of the ceremonies connected with the New Year observances of the pagan Indians on the Grand River Reserve, where the invaluable services of J. Ojijatekah Brant-Sero were utilized as interpreter.

In 1899 totally new ground was struck in Pelee Island, Canada's most southerly point, near the west end of Lake Erie. Several mounds at the south end of the island were opened, but nothing of any importance was noted in connection with these examinations.

This year we had accounts from the pens of Messrs. G. E. Laidlaw, A. F. Hunter and W. J. Wintemberg, of the investigations they had made privately or non-officially in the counties of Victoria, Simcoe, and Oxford and Waterloo, respectively.

Mr. W. E. Connelley of Topeka, Kansas, in the report for the year (1899) was good enough to supply a highly valuable essay on the Wyandots, who were akin to the Huron people. In this paper, Mr. Connelley treated their Legends, Clan System, Government, Proper Names, and other topics.

During 1900 but little field work was done beyond the examination of several village sites in Oxford and Waterloo counties by Mr. Wintemberg. Of this work he prepared a good account which appeared in the annual report, to which also a paper on The Flint Workers—A Forgotten People, was contributed by the Very Rev. Dean W. R. Harris, and others by Mr. Wintemberg, Lieut. Frederick Hamilton, and Mr. A. F. Hunter, M.A.

In 1901 an ossuary and a mound were examined in Clinton township, Lincoln county, an earthwork of considerable importance on lot 26, con. 11, Moore township, Lambton county. The last named was visited in company with the late Dr. T. G. Johnston, M.P., of Sarnia, and the late Mr. Alfred Willson, C.E., Manager of the Canada Company. Mr. Willson made a fairly accurate survey of the ground.

Mr. Wintemberg examined a Supposed Fish Weir near Drumbo, Mr. L. D. Brown contributed a paper to the report, on Indian Occupation in Nissouri; Mr. W. Brodie, on Animal Remains on Indian Village Sites, Mr. F. W. Waugh, Notes on Canadian Pottery, Mr. A. F. Hunter, On Wampum Records of the Ottawas, as well as one,—Notes on Huron Villages in Medonte, while there were two papers by Mr. Geo. E. Laidlaw—Notes on North Victoria Village Sites, and Some Ethnological Observations in South Africa.

In 1902 an ossuary was examined at Bradford, Simcoe county, but when the spot was reached, it was found that "curio" seekers had almost destroyed the appearance of the place—wholly so, indeed for any scientific

purpose. A ghoulish craze seemed to have taken possession of many people in the village, so that in passing along its principal street skulls were seen on window-sills, while in not a few sitting-rooms they occupied prominent places on centre-tables!

Mr. Stibbs, the owner of the ground was anxious to have all the skulls placed in the Provincial Museum, but not a single person showed any willingness to give up his gruesome specimen—that which he might show to his or her more rural visitors, especially ladies, and over which utterances might be bandied in solemn tones with deep-drawn sighs, while the speakers were fully of the belief that their made-to-order-moralisings were the outcome of pure and undefiled religion!

At least one man contemplated having the top of his skull sawn off to form an ink-bottle stand! Of course he meant his *Indian* skull, but this was a mistake!

Dr. J. E. Brown in this year presented the museum with two perforated skulls taken from an ossuary in Warwick township, Lambton county. In both skulls the holes have evidently been bored, not cut, and after death at that.

Examinations of village sites were made by Mr. G. E. Laidlaw in North Victoria, and by Mr. W. J. Wintemberg in Waterloo county, by Mr. F. W. Waugh in Brant county, and by the late Mr. R. T. Anderson on Sites in Yarmouth, Malahide, and Bayham townships.

In this Report also the Rev. A. E. Jones, S.J., presents his story of the "Identification of St. Ignace II., and of Ekarenniondi," two long disputed sites in connection with the Jesuit Missions in this Province.

In 1903 most of the curator's time was spent in the museum, on account of the removal of the material from its old quarters, but some of our amateur friends busied themselves in different parts of the province and reported the results for publication in the reports. As a matter of course the perennial enthusiasm of Lieut. G. E. Laidlaw, who has made North Victoria his own archæologically, gave us an interesting article on Village Sites in his county, and as usual presented the museum with his highly valuable gleanings. Mr. A. F. Hunter described "Indian Village Sites in North and South Orillia" and our particular friend, the Rev. Dean Dr. W. R. Harris, wrote for us, "The Caribs of Guiana and the West Indies," among which people he had spent considerable time.

Not the least interesting, as well as instructive article in the report for the year was that entitled "The Killing of Moostoos, the Wehtigoo," which consisted wholly of an abbreviated court report of the evidence taken at the trial of two Crees, Payoo and Napaysoosee for the killing of another named Moostoos, who, himself declared that he was about to become a Wehtigoo (Wendigo, or bad spirit) and would eat everybody. The material for this instructive article came to us from Mr. J. R. Boyle, M.P.P., Edmonton, Alberta.

Official duties in 1906 demanded all possible time in the Museum where it was found necessary to do a good deal by way of re-arranging and, in many cases, re-classifying material, but Mr. W. H. C. Phillips, a temporary assistant, was sent to examine the rock paintings on Lake Nonwakaming, and Lady Evelyn Lake in the Temagami District. Drawings of these were made, and they appear as illustrations in the year's report.

In 1907, I visited (in company with Mr. C. W. James, Secretary of the Education Department) the River Nipigon where similar aboriginal paintings were known to exist. These also were copied by us and illustrations of them appear in this report.

NOTES ON SOME SPECIMENS.

POTTERY.

It is extremely difficult to find perfect specimens of pottery in Ontario. When these have been placed in shallow graves, or not far from the surface in deeper ones they are always found in a fragmentary condition. Most of the whole specimens in the Museum (only a small number) have been found in unexposed places, such as rock ledges, several feet above the ground, where they were probably placed for preservation during the absence of the people who owned them. It may have been the custom to keep one or more vessels of this kind at various camping-places, thus avoiding danger of breakage in the carrying of such fragile utensils through the woods, along narrow trails.

Fig. 1.

Even when one discovers large numbers of fragments on or near the site of some old dwelling-place, it is almost impossible to fit enough pieces to form a whole pot.

Dr. R. B. Orr, of Toronto, on one occasion was fortunate enough, or, perhaps it should be said, persevering enough, to match pieces, forming the complete mouth or lip of a very large pot, measuring 17 inches in height and 17½ inches in diameter across the body. The full form is shown as restored, at figure 1. No attempt has been made to assimilate the color of the stucco, with that of the fragments, as the only object of restoration was to bring out the original shape of the dish, but unfortunately the workman forgot to make

the bottom as round as it ought to be. Round the lip of this pot there is a flat border, relieved with diagonally incised lines, as shown by means of the accompanying sketch. This huge vessel was found in the township of Vaughan not far from Richmond Hill, a part of the country formerly occupied by some people closely akin to the Hurons or Wyandots.

Another clay vessel (figure 2) not quite so large (16 inches high, and nearly the same in diameter) was found in Nottawasaga. It has also been restored, as per figure 2, the lighter portions showing the added plaster-of-paris.

In each case there were enough fragments to indicate the original shape without any doubt.

Fig. 2.

CATLINITE (red pipestone).

"Smoking was a custom of great moment among the aborigines of northern America, and much time and labor were expended in the manufacture and decoration of the tobacco pipe, which is often referred to as 'the sacred calumet,' because of its important place in the ceremonial affairs of the people. A favorite material for these pipes was the red claystone called catlinite, obtained from a quarry in S. W. Minnesota, and so named because it was first brought to the attention of mineralogists by George Catlin, the noted traveler, and well-known painter of Indians. Stone of closely analogous characters, save in the matter of color, is found in many localities and has been used by the Indians for the manufacture of pipes and other articles, but so far as known to us it has not been quarried in most places to any considerable extent. Catlinite is a very handsome stone, the color varying from a pale grayish-red to a dark red, the tints being sometimes so broken and distributed as to give a mottled effect. It is a fine-grained, argillaceous sediment, and when freshly quarried is so soft as to be readily carved with stone knives and drilled with primitive hand drills. The analysis made by Dr. Charles F. Jackson, of Boston, who gave the mineral its name, is as follows:—Silica, 48.20; alumina, 28.20; ferric oxide, 5; carbonate of lime, 2.60; manganous oxide, 0.60; magnesia, 6; water, 8.40; loss, 1.

"The deposit of catlinite occurs in a broad, shallow, prairie valley, on the margin of which is situated the town of Pipestone, county seat of Pipestone Co. The outcrop was probably discovered by the natives where it had been slightly exposed in the bed of the small stream, now called Pipestone cr., which descends into the valley on the E. in a fall 18ft. in height, and traverses the basin, passing out to the N. W. So far as ex-

posed, the stratum of pipestone varies from 10 to 20 ins. in thickness, the band of pure, fine-grained stone available for manufacture of pipes, rarely measuring more than 3 or 4 ins. in thickness. This stratum is embedded between massive layers of compact quartzite which dip slightly to the eastward, so that in working it the overlying quartzite had to be broken up and removed, the difficulty of this task increasing with every foot of advance. With the stone implements in use in early times the process was a very tedious one, and the excavations were consequently quite shallow. The ledge which crosses the stream approximately at right angles had been followed to the right and left by the quarrymen until the line of pittings was nearly a mile in length. These ancient diggings have been almost obliterated by the more recent operations, which, since the advent of the whites, have been greatly accelerated by the introduction of the steel sledges, picks, shovels and crowbars. It is said that with the aid of the whites, blasting had been occasionally resorted to. Some of the present excavations are as much as 10 ft. in depth, and have advanced 20 ft., or more, along the dip of the strata to the E. The usual section now exposed in the deeper excavations, beginning above, shows from 2 to 4 ft. of soil and from 5 to 8 ft. of quartzite resting on the thin stratum of pipestone, beneath which, again forming the bed of the quarry, are compact quartzites. Numerous hammers of hard stone, some roughly grooved to facilitate hafting, have been found about the older pits, and the prairie in the vicinity is dotted with camp sites and tent rings, about which are strewn bits of pipestone and other refuse of manufacture.

"There is a general impression among those who have written on the subject, that the discovery and use of the red pipestone by the tribes is of comparatively recent date, and this is no doubt correct ; but, it is equally certain that it was in use before the arrival of the whites in the N. W. This is made clear not only by history and tradition, but by the appearance of the ancient quarry excavations, and especially by the occurrence of pipes and other objects made of it by aboriginal methods in mounds in various sections of the country. This quarry is usually referred to as the sacred pipestone quarry. According to statements by Catlin and others, the site was held in much superstitious regard by the aborigines. Traditions of very general distribution lead to the belief that it was, in the words of Catlin, "held and owned in common, and as neutral ground amongst the different tribes who met here to renew their pipes, under some superstition which stayed the tomahawk of natural foes always raised in deadly hate and vengeance in other places." (N. Am. Indians, II., 201, 1844). Nicollet states (1838) that Indians of the surrounding nations made an annual pilgrimage to the quarry unless prevented by wars or dissentions. Since the earliest visits of the white man to the Coteau des Prairies, however, the site has been occupied exclusively by the Sioux, and Catlin met with strong opposition from them when he attempted to visit the quarry about 1837.

"The following facts regarding the historic occupancy and ownership of the Pipestone quarry are extracted from a statement furnished by Mr. Charles H. Bennett, of Pipestone; 'On April 30, 1803, the region was acquired by the United States through the Louisiana Purchase. On July 23, 1851, the lands, including the quarry, were relinquished to the United States by the Sisseton and Wahpeton Sioux, and on August 5 they were relinquished by the Mdewakanton and Wahpekute Sioux, and 64 chiefs and head warriors who had also a claim. A treaty with the Yankton Sioux, ratified April 19, 1858, specifies that 'the said Yancton Indians

shall be secured in the free and unrestricted use of the red pipestone quarry, or so much thereof as they have been accustomed to frequent and use for the purpose of procuring stone for pipes; and the United States hereby stipulate and agree to be caused to be surveyed and marked so much thereof as shall be necessary and proper for that purpose, and retain the same and keep it open and free to the Indians to visit and procure stone for pipes, so long as they shall desire.' In 1859, one square mile, including the quarry, was surveyed as a reservation, and in 1892 Congress appropriated $25,000 for the establishment of an industrial school, which is now (1905) being successfully conducted, with several stone buildings and some 200 pupils. It is situated on the highland overlooking the pipestone quarries on the east. The Sioux have no other legal claim upon the quarry site than that of quarrying the pipestone, a privilege of which they yearly take advantage to a limited extent. The Yancton Sioux, sometimes accompanied by their friends, the Flandreau Sioux, continue to visit the quarry and dig pipestone, coming usually in June or July. They establish their tents on the reservation near the excavations and stay from one to two weeks, procuring the pipestone, which they manufacture into pipes and trinkets of great variety.

The Indians sell much of the stone to the whites, who have taken up the manufacture of pipes and various trinkets, using lathes to aid in the work, and in a letter written by Mr. Bennet in 1892, it is stated that not one per cent. of the pipes then made and disposed of were of Indian manufacture. White traders began the manufacture of pipes from the pipestone many years ago, and according to Hayden these were used by the fur companies in trade with the Indians of the northwest. At a meeting of the American Philosophical Society in 1866, Hayden stated that in the two years just passed, the Northwestern Fur Company had manufactured nearly 2,000 pipes and traded them with the tribes of the Upper Missouri. An important feature of the quarry site is a group of large granite boulders, brought from the far north by glacial ice, about the base of which, engraved on the glaciated floor of red quartzite, were formerly a number of petroglyphs no doubt representing mythological beings associated with the locality. These have been taken up and are now in possession of Mr. Bennett. Additional interest attaches to the locality on account of an inscription left by the Nicollet exploring party in 1838."—*From "Catlinite," in the Handbook of American Indians, by Dr. W. H. Holmes.*

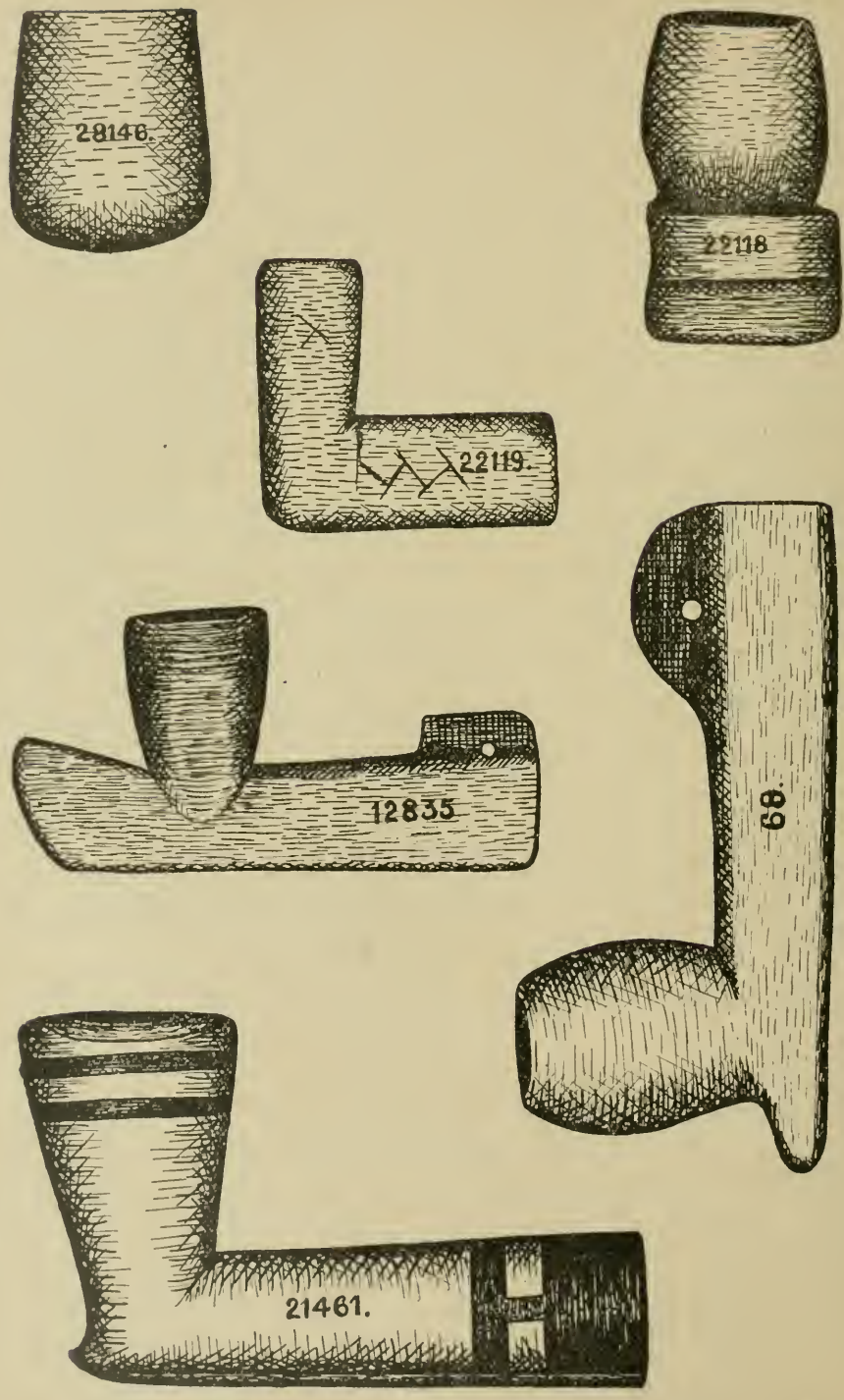


PLATE I.

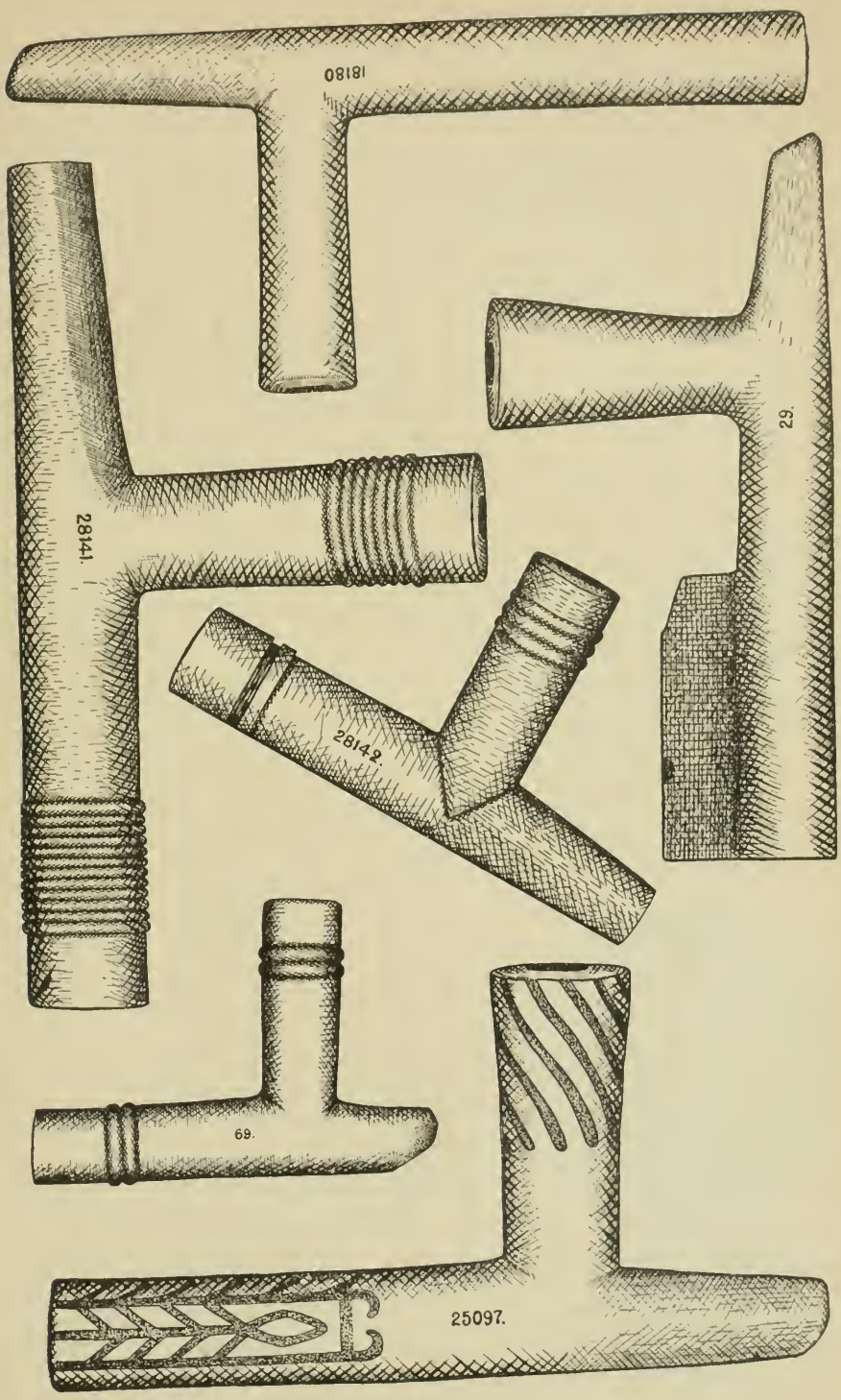


PLATE II.

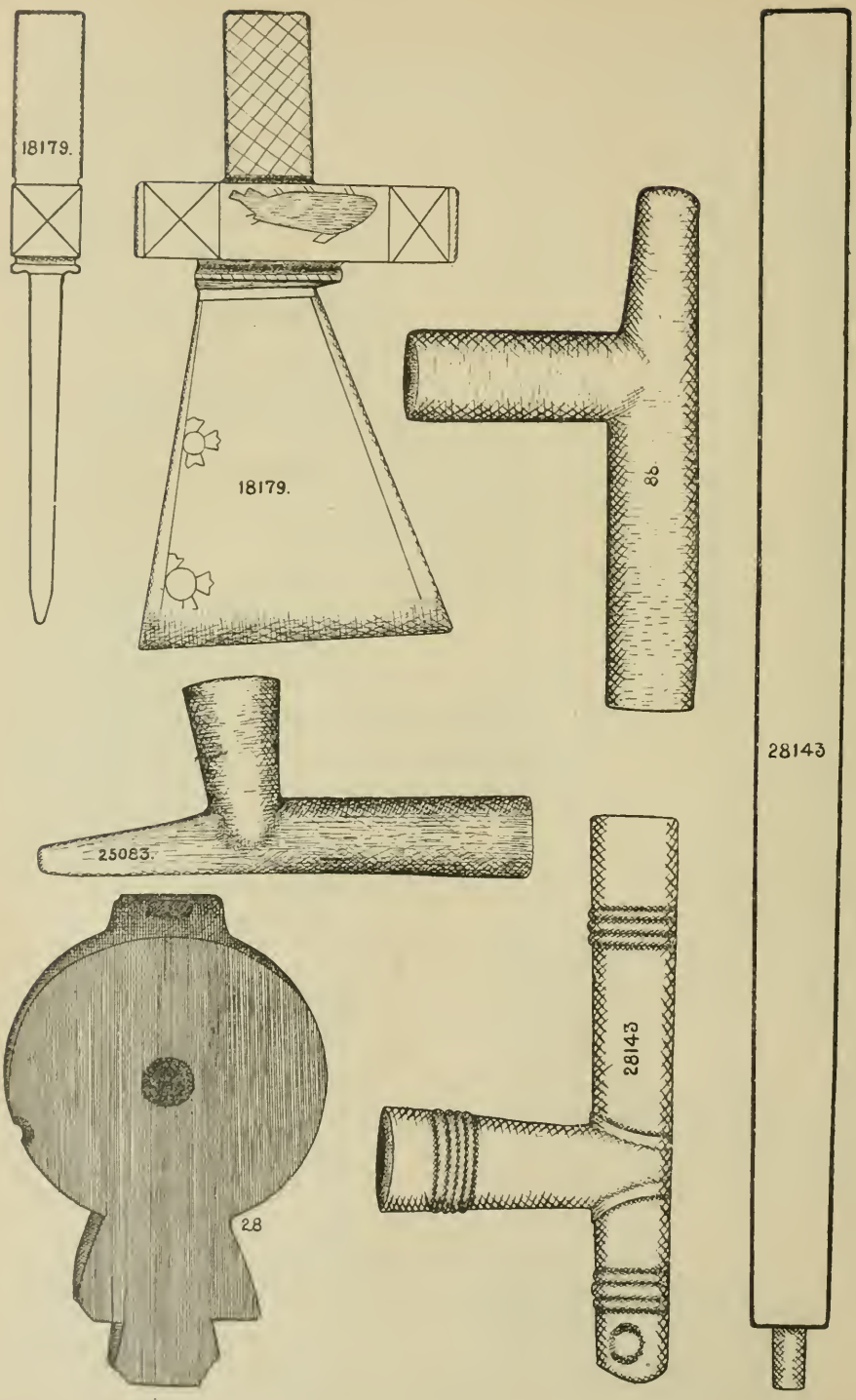


PLATE III.

CATLINITE PIPES.

Plates I, II and III show drawings of all the catlinite pipes in the Museum, most of these, as might naturally enough be expected, came to us from Manitoba and from adjoining states of the Union, as well as from some of our western provinces, but it is somewhat surprising to find so many that have been collected in Ontario, not of recent importation, but in such places and circumstances as to indicate pre-historic, or very early historic movements.

The color and working qualities of the material were attractive to users as well as to makers, and the finding of such pipes many hundreds of miles from the source of supply, leads us to infer that the pipes were employed in barter of some kind with, eastern, western, and southern peoples, perhaps also with northern ones, but at present we have no knowledge of how far north the trade may have extended.

On Plate I.

28146 is from the Peigan Reserve, N. W. T.
22118 " Manitoba—H. Laidlaw.
22119 " " "
12835 " L. Erie shore, Ontario—Capt. J. G. Spain.
68 " Nottawasaga, " Mr. Bend, Penetanguishene.
24161 " North shore, L. Superior, Ontario—Alfred Willson.

Plate II.

18180 is from Saskatchewan—G. E. Laidlaw.
28141 " Peigan Reserve.
29 " York township, Ontario—York Pioneers.
28142 " Blood Reserve, N. W. T.
69 " Minnesota, U. S. A.
25097 " N. W. T.—E. Wilson, Tilsonburg.

Plate III.

18179 is from Fort Qu'Appelle, N. W T.—G. E. Laidlaw.
88 " Lake Winnipeg, Manitoba—Hon. J. Norquay.
25083 " North Dakota, U. S. A.—J. Brown.
28 " Nottawasaga, Ontario—Mrs Ed. Beecroft.
28143 " Blood Reserve, N. W. T.

Catlinite pipe specimens have also been found as far south as Mississippi and Alabama.

It should be observed that all catlinite pipes are not of Indian make. Many white men have produced pipes of this material for trade purposes, or for their own use, and it is said that at least one fur company found it profitable to manufacture nearly, if not quite, two thousand. As a rule,

it is not very difficult to distinguish the machine made article from the Indian product, but there is little doubt that numerous "White" hand-made specimens pass for Indian.

SPINDLE WHORLS.

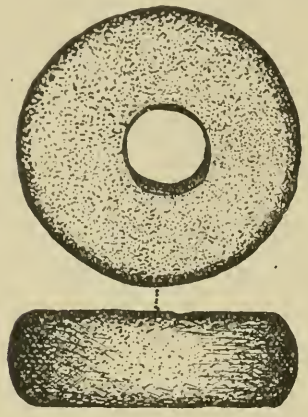


Fig. 3. (28312).

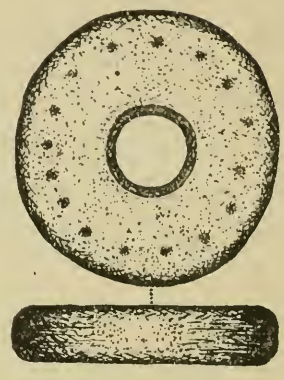


Fig. 4. (28313).

Spindle whorls, like those represented by figures 3 and 4 are common in many parts of the world. These were found by Mr. Matheson, of Canisbay, Caithness, Scotland, and were presented to the Provincial Museum, through his niece, Miss Nicolson, now residing in Edmonton, Alta.

Fig. 3 is perfectly plain, but the other is ornamented on each side with a concentric series of shallow, incised pits or dots. One, of clay, somewhat less in diameter, from Mexico, is ornamented on one of its sides, with a beautifully cut impression of an eagle with outspread wings, but as a rule, objects of this kind are quite plain.

STONE CIST.

Anything having even a remote resemblance to a rectangular chamber for any purpose connected with aboriginal burial was almost, if not quite, unheard of in this country until something of the kind was reported to the Provincial Museum by Mr. William Couse, Merchant, of Streetsville, late in the fall of 1906.

As soon as favorable weather came next spring, the place was examined. It lies in a field close to the village, on lot 3, concession 5, Township of Toronto, Peel county, and at a distance of not more than 22 miles from this city.

When Mr. T. M. Edmondson, who owns the property, was cultivating this field, the plough struck some large and solidly fixed limestones, which, on being examined closely with the aid of the spade, were found to be placed edgewise in two rows.

Fig. 5.

Mr. Edmondson, Mr. W. Couse and Mr. A. W. Cameron, B.A., Principal of the Streetsville High School, all, it need hardly be said, intelligent workers, were kind enough to assist at the reopening of the ground, when I visited the place early in May, 1907. I found that some of the limestone slabs had been removed at the first opening and were lying a short distance from the hole where they had been placed in the cist structure. The stones, however, remaining in position were sufficient (with the explanations given by Messrs. Couse, Cameron and Edmondson) to give a good idea of how the stone chamber was put together. One of its sides was formed of two slabs, the other of three, and each of the ends was closed with one. They all enclosed a space about seven feet long and little more than a foot wide at the bottom (four and a half feet deep) but not more than six or eight inches in width at the top. The difference in width at the top was probably due to outside pressure of the earth, rather than to intention on the part of the cist-makers. There were no cap-stones to this chamber, but the likelihood is that a covering of this kind did exist, lying nearly, if not quite on a level with the surface of the soil, as it must have done, and these stones must have been removed at some time in the early days of cultivation.

As already mentioned, the slabs forming this cist are of limestone. They are quite irregular in form and bear not a mark to indicate any attempt to shape them. On one or two of them glacial striæ appear and on such spots, as a matter of course, the surface is comparatively smooth while the rest of the surface is roughly weathered, bringing out numerous fossil forms, but very obscurely. A few of these resemble chætetes of one or more species and one undoubted section of a small crinoid was observed. Similar material forms the banks and bed of the Credit River close by and

loose pieces like those used in the building of the cist are numerous in some places on the surface of the soil. Three of the stones were more columnar in shape, with roughly rounded ends uppermost, but these had been removed, and their position in the structure was not clearly noted when the first opening was made. Lengthwise, the cist stands nearly east and west.

There can be no reasonable doubt that the arrangement of the stones was the work of human hands, but for what purpose it is quite impossible to say. At first sight one would naturally look upon it as a grave, unusual as it is to find graves of this kind in Ontario, but failure to find a particle of material suggestive of bone or other animal remains, leaves a supposition of this kind in doubt. It should be noted that there is no stone bottom to the structure, and it may be that had a human body ever been placed in it, the remains have become wholly assimilated with the clay, but this is not at all likely.

We are left, therefore, to surmise at pleasure, as did one gentleman who came to the conclusion that the stones had been placed as they were found to show that some important Indian meeting had been held here; the slabs representing the various tribes, and the pillar-round-topped stones, the witnesses!

Further examination may reveal the names of the tribes, as well as of the witnesses who were present, indicating who acted as president and secretary; the date on which the meeting was held; how many weeks it lasted; the subjects of discussion; when adjournment took place; and the respective numbers of bears, deer, wolves, racoons and other "critters" consumed during the big feast, for, as a matter of course, there was a feast, and, no doubt, many dances too.

The stones are numerous enough, strongly marked enough, and large enough, to contain all such information and even more, if only some one clever enough can be found to read them aright.

Hearty thanks are due to Messrs. Couse, Cameron and Edmondson, for their kind services, in many ways, during the examination of this really unique stone chamber, a structure which introduces to us a wholly new feature in the manners and customs of some of those who occupied this country long ago.

ROCK PAINTINGS.

For many years it has been known to the curator that rock paintings existed on Nipigon Bay, but it was only last year that it was found possible to make any examination of them. Accompanied by Mr. C. W. James, Secretary of the Department of Education, the pictographs were found at the base of a precipitous rock, some four or five hundred feet high, on the north side of the bay, about five miles east of Nipigon station on the Canadian Pacific Railway, and probably quite as far from where the bay joins Lake Superior.

Our canoe was managed by the brothers McKirdy, two intelligent young men who know every spot in the neighbourhood, and who thus lost no time in reaching the place.

We landed on a ledge only a few inches above the water, where there was barely room to turn even with difficulty. It seemed almost impossible to reach the level of the paintings only a few feet above our heads, and this, perhaps would have been impossible, but for the agility of Mr. James who made his way to the place, where, with the tape line he succeeded in making all the measurements necessary. These drawings are illustrated on plates IV and V.

They occupied a straggling space about ten feet long, and four or five wide, on a tolerably smooth face of rock.

Nobody pretended to know what they signified. Even the Indians, as has been stated in former reports, do not possess any knowledge of what they mean, and it is utterly vain to make any inquiry on this point.

The dots may represent a number of men, or of any other animals, and one may see a few canoe-forms, the upright strokes standing for human beings ; the quadruped may be meant for a bear ; the fish-forms for what they look like ; the undulating figure for a snake, and so on, but to get a connected story is quite out of the question. One or, at most, two generations, suffice to remove all such knowledge from the primitive man's mind, and when any present day Indian claims to have knowledge of this kind, it should be accepted with some hesitation. It is, however, only fair to state that I have never heard of an Indian claiming to know any more of what the old petrographs mean, than we, ourselves, may gather.

Many people are given to the recording of events in some such way. A friend who served against the Boers in South Africa, sends me two photographs of rock drawings at a burial place not far from Kimberley, and these are illustrated on an accompanying page.

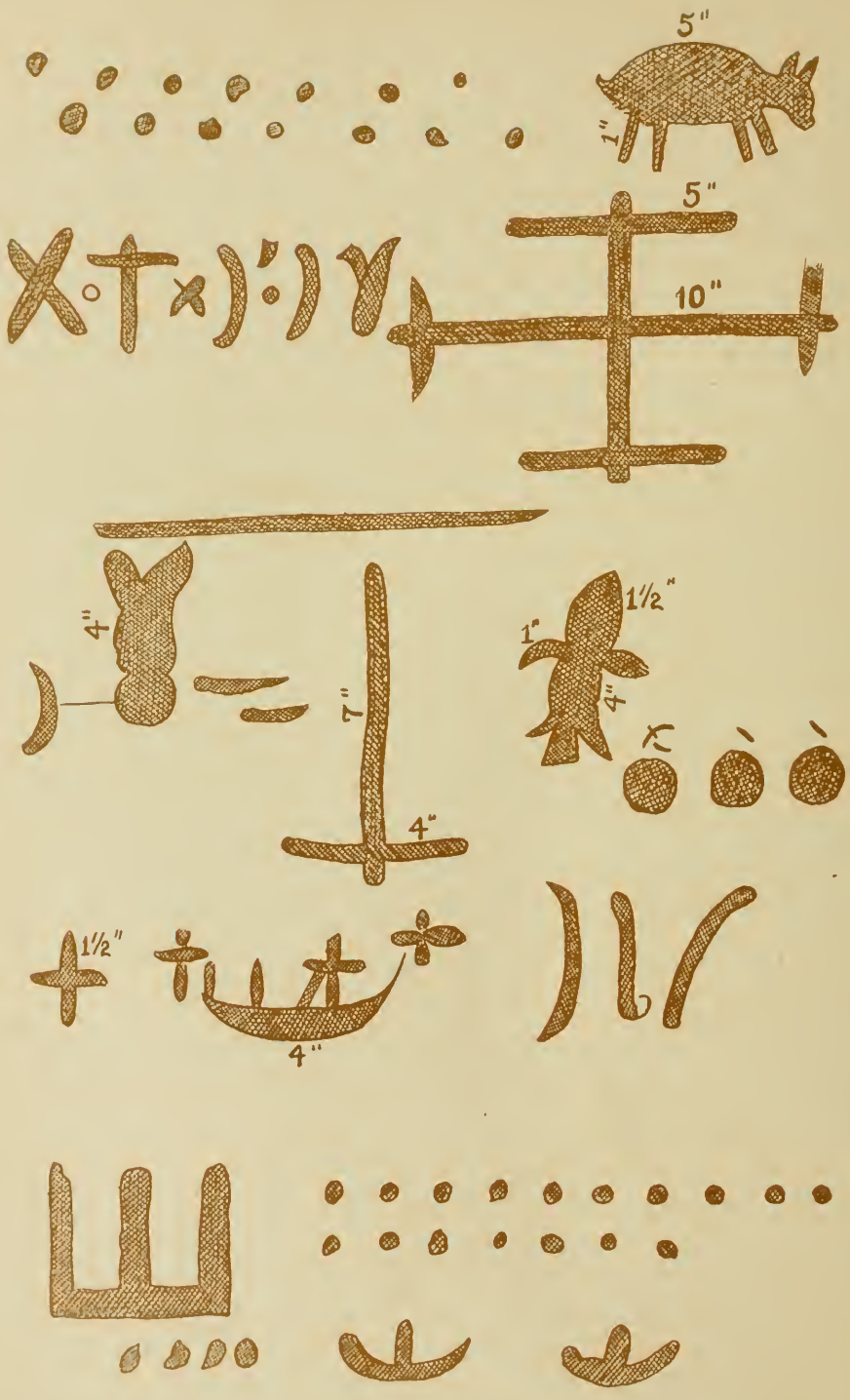


PLATE IV.

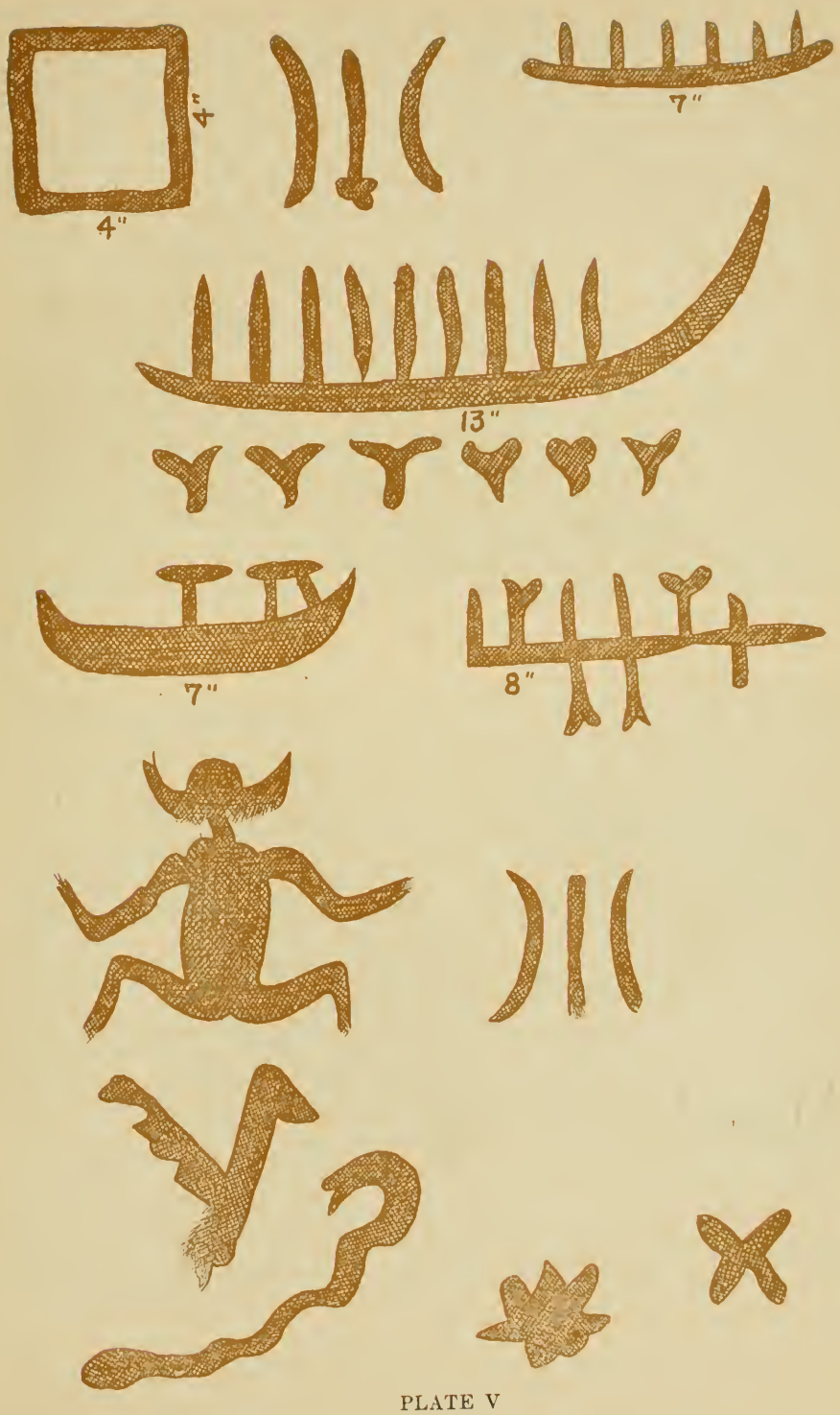


PLATE V

Fig. 6.

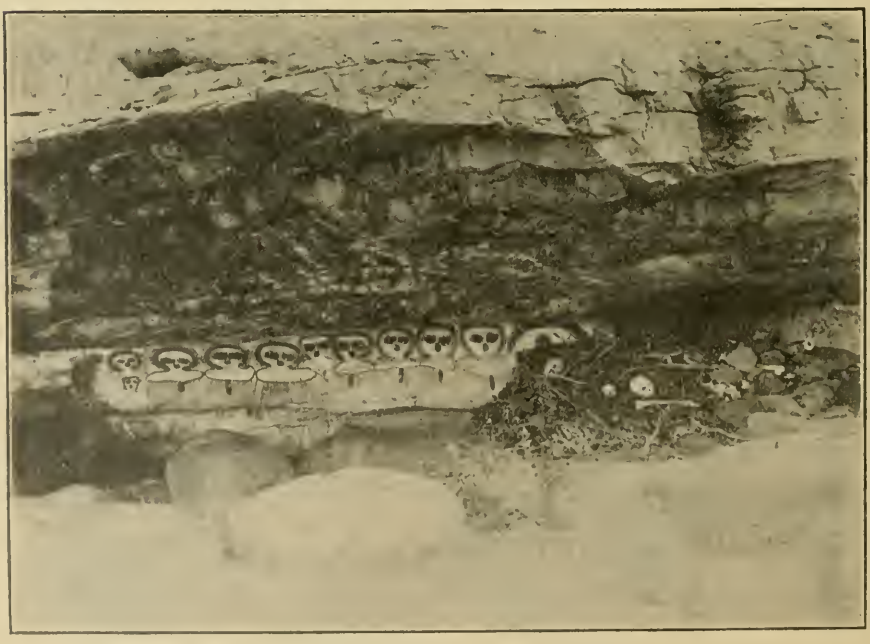


Fig. 7.

Negro Rock Paintings, Kimberley, S. Africa.

COPPER.

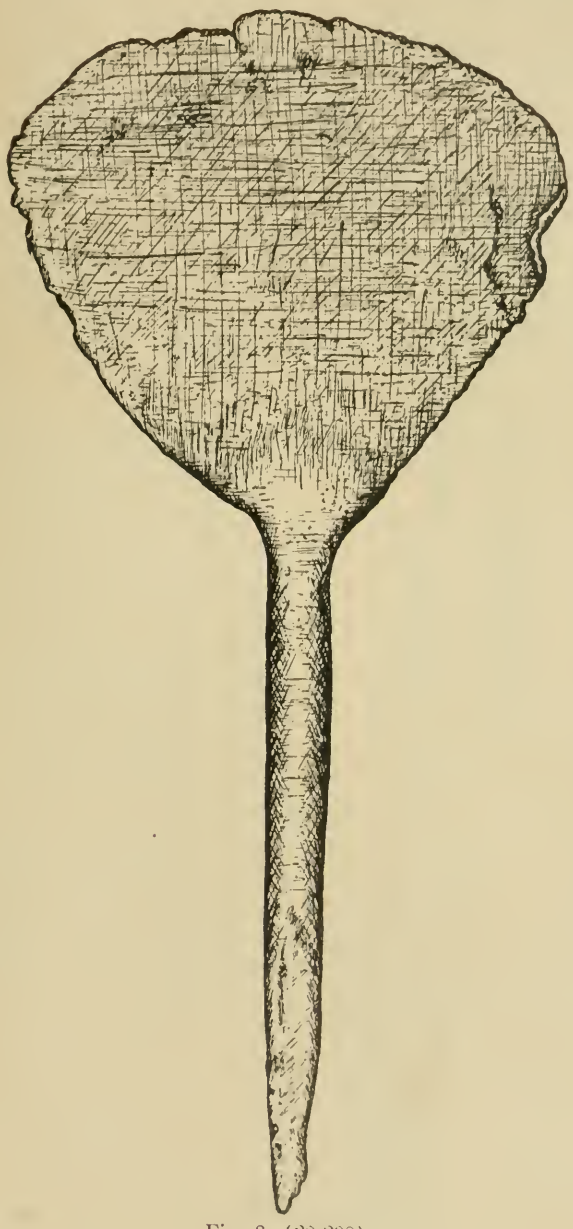
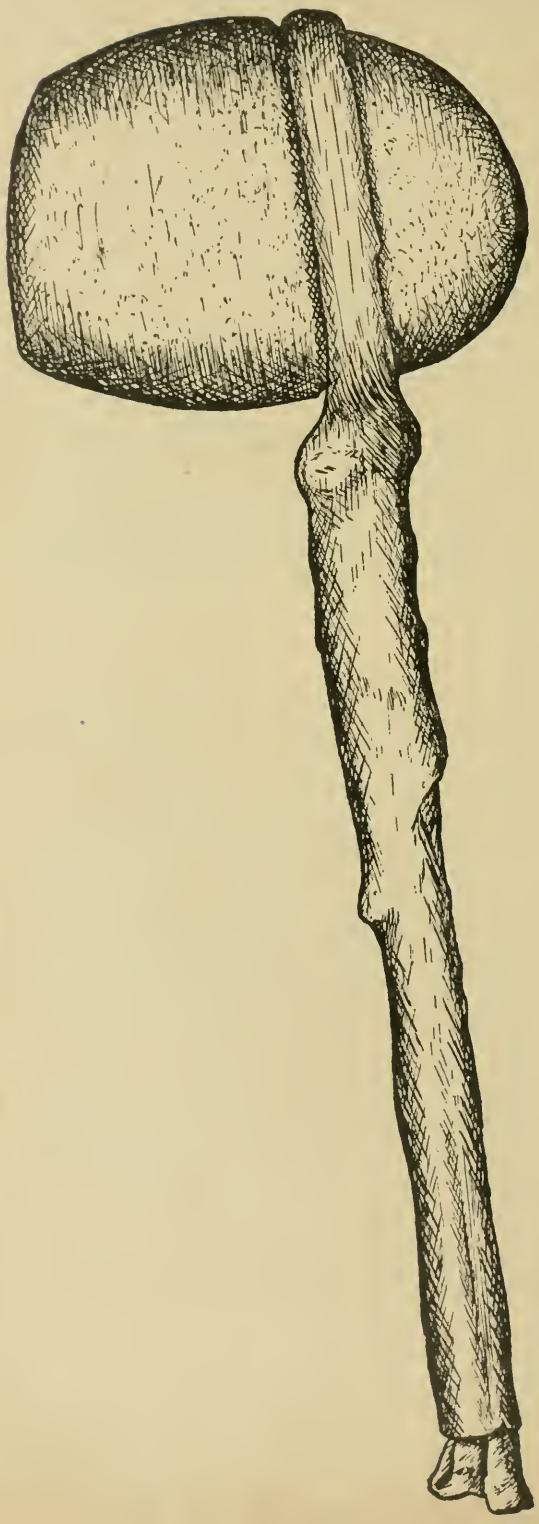


Fig. 8. (28,298)

This specimen, figure 8 (28,298), was presented to the Museum by Mr. William McKirdy, Merchant, Nipigon. It was found in a gravel-pit, near Nipigon, and is regarded by him as a sort of scraper.

It is six and a quarter inches long, and, at its widest part, is nearly three inches wide. It may have been used just as it is, or the tine may have been inserted wholly, or only partly into a piece of wood or antler, as it is quite round and smooth, except for an inch and a half at the end where it is somewhat flattened.

STONE CLUB OR HAMMER.



The war-club here figured (28,147) is from Mr. G. C. Wright, Kingston, and came from the Blood Indian Reserve, North-West Territory. The handle is not exactly in line with a cross-section of the head, but the tool or weapon must have been a formidable one in the hands of any Indian, whether used in war or in the chase, or in the mere driving of stakes.

The head is of granite, somewhat deeply grooved to receive the shaganapi or rawhide with which the handle is bound.

Figure 10 was found on the prairie near Winnipeg, and was presented by Mrs. Hutton, sen., to the museum.

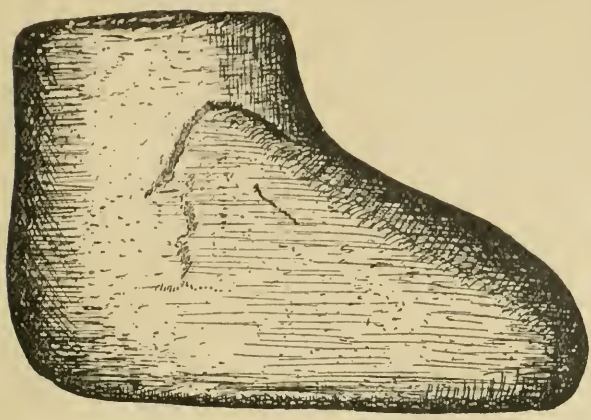


Fig. 10.

Had this specimen been seen by one of the old people it would undoubtedly have been appropriated for the making of a pipe-head. It is very solidly laminated, with a jasperoid appearance, and only requires the boring of two holes to make a serviceable pipe. The Indians were always on the outlook for raw material, the natural shape of which would facilitate the production of any finished object they wished to make.

The lower side is quite flat, but rough, and without any trace of glaciation.

WILLIAMSBURG.

During the summer a visit was made to the farm of Mr. R. Merkely lot 30. Con. 5, township of Williamsburg, Dundas county. The village situated here had been examined once before in company with Mr, Arthur Brown, Pub. School Inspector for the county.

Mr. Brown seemed to have had a notion that on the occasion in question we had failed to make as thorough an examination as was desirable, and for the purpose of settling all doubts, the second examination was made, but although new ground was broken in several places we did not succeed in adding to our stock of information, further than to show that the burial area was somewhat more extensive than we at first supposed. No relics of any value were found, although evidences of aboriginal occupation were numerous in the form of ashes, fragmentary bones and broken pottery. Mr. Brown has since learned that the proper place to examine is some rods from the spot we dug into the second time.

THE USE OF SHELLS BY THE ONTARIO INDIANS.

W. J. WINTEMBERG.

NATURE makes many contributions to the wants of man, and of these *shells* figure quite prominently; indeed, scarcely any of the natural productions of North America have commanded more general acceptance than the many species of shells abounding on the sea-shore and in the fresh-water lakes, rivers and streams. In our own Province, of course, very few large shells were available, although the *Unios* (some with beautiful pearly interiors) were, as will be seen from what follows, utilized to some considerable extent, not only in the domestic economy of the Indians, but also in the ornamentation of their persons. The same remark will apply to the univalves as well.

Besides our native shells there are many oceanic species which have found their way hither through the channels of trade, or perhaps as reprisals in warfare. These consist principally of several varieties of conchs, the large *Busycon perversum* (figure *b*, plate XVII) especially, and other smaller species, which will be described more fully under the head of ornaments.

Although they were in common use to the south of us, there is no record of any pearls having been used by the Indians anywhere in Ontario.

I. SHELL-FISH AS FOOD.

As food is the first requirement of man, we shall also first consider the subject of shell-fish as food. In man's most primitive state his animal food was derived mainly from such species as could most easily be obtained, and we may be sure that among these the mulluska were brought into use first. As Mr. Holmes says, "Weapons or other appliances were not necessary in the capture of mollusks; a stone to break the shell, or one of the massive valves of the shells themselves, sufficed for all purposes."[1]

We would naturally expect to come across allusions to the use of shell-fish for food by the interior tribes in the *Jesuit Relations* or in other early narratives, but in not one of these do we find a single reference. Such references as we do have, relate to species found on the Atlantic coast only. This is all the more surprising when we consider how minutely these early writers went into details of savage life. The use of the land and fresh-water snails also seems to have escaped notice; but when we find that some of these same writers state that the Indians ate snakes, "Grubs, the *Nymphæ* of Wasps, some kinds of *Scarabæi*, *Cicadæ*,"[2] locusts, spiders and unmentionable filth and vermin, we must come to the conclusion that snails, being less objectionable than some of the things mentioned, would likewise be eaten.[3]

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[1] "Art in Shell of the Ancient Americans." (*Report Bureau of American Ethnology* 1880), p. 188.

[2] Robert Beverly: *The History and Present State of Virginia* (London, 1705), Book III., p. 60.

[3] Since the above was written the following information was received from Dr. A L. Kroeber, Secretary of the Department of Anthropology, University of California: "The most prominent and conspicuous animal of the snail kind that occurs in the moister parts of California," he says, "is the large yellow, horned slug [*Ariolimax californicus*, evidently], growing to a length of five or six inches. This I know to have been eaten by the Indians of Northwestern California, and I presume by other tribes also. It is said to have been broiled alive on hot stones. A smaller, dark reddish snail, also with horns, and an almost perfectly round flat shell, about an inch and a half in diameter and less than half an inch in height, was also eaten, being prepared in the same way."

Notwithstanding this silence on the part of our early explorers, archæological researches have revealed numerous evidences that most of our shell-fish and even land snails were used as food.

Shell heaps composed of fluviatile species of clams have been found in the interior parts of the country; notably a very large one on the shore of the Concord River, Massachusetts. It was made up almost entirely of shells of *Unio complanatus*, a species which still exists in the river. Ernest Ingersoll,[1] the well-known naturalist, discovered one in Tioga county, New York, but he does not state what species were represented. Dr. Beauchamp informs the writer that he has seen *U. complanatus*, which he says "was the favorite mollusk for food mostly used by the Iroquois," in large beds and small heaps on the Susquehanna. Other *Unio* shells very rarely occur on early Iroquois sites in New York. In Ontario we have a record of only one shell heap, and this is near the Indian mounds at Cameron's Point, in the Rice Lake district. Of this shell heap Mr. Boyle writes: "A little east of the mounds, and now close to the edge of the cliff, there is a quantity of mussel shells, forming a bed from one to ten inches in thickness and seventy-five feet in length. That these were brought here in connection with food purposes there cannot be a doubt, and the Indians of the Alnwick Reserve across the lake explain the presence of so many shells by stating that on one occasion their people would have died of famine but for the plentiful supply of mussels. However this may have been, there are the shells, pointing to an unusually large or long-continued consumption of this kind of food."[2]

We may be sure that most species of mussels native to Ontario figured quite prominently at the aboriginal repast. Of the species represented in the Museum's collection there are: *Unio gibbosus*, *complanatus*, *luteolus*, *rectus*, *ventricosus*, *alatus*, *ligamentinus* and *plicatus*, and *Margaritana costata* and *marginata*. *Anodonta footiana*, *Magaritana rugosa*. and *Unio pressus* were found on village sites in York county.[3] *M. rugosa* is not a native of York.

Of the above species *U. gibbosus* (in Waterloo and Oxford) and *U. complanatus* (somewhat generally distributed) are most abundant. *U. ligamentinus*, also fairly well represented in the collection, seems to be confined to the Thames drainage, and *U. rectus* is peculiar to the Brant district.

And now as to snails, their shells are frequently collected on the sites of our Indian villages, and also have been found in shell-heaps in the United States. In one of these shell-heaps in Maine, explored by Professor Wyman and others, the following species of land snails were discovered: *Helix albolabris*,[4] *Sayii*, *alternata*, *lineata*, *striatella*, *indentata*, *multidentata*, *Zua lubricoides* and *Succinea Totteniana*.[5] The mussel shells having been used as food, and the land snails being present in the same heap, would indicate that they were used for the same purpose. In the shell-heap referred to as discovered by Mr. Ingersoll, "a few land shells

[1] *Apud* Dr. C. C. Abbott: *Primitive Industry* (Salem, Mass., 1881), p. 442.

[2] *Annual Archæological Report of Ontario* for 1896-7, p. 31.

[3] "Animal Remains found on Indian Village Sites," *Annual Archæological Report* for 1901, page 45.

[4] There is considerable confusion in our scientific nomenclature. The Helicidæ in America being divided into different genera, the shell mentioned is now *Polygyra albolabris*.

[5] *American Naturalist* (Salem, Mass., 1868), Vol. I., p. 566.

(*Helix*) were also seen, but they may have crawled there and died; that is," he says, "I would not care to assume they were eaten by the Indians."[1]

During the course of his exploration of Indian village sites in Oxford and Waterloo, the writer has noted the following species: *Polygyra albolabris*, *dentifaria*, *thyroides*, and *tridentata*, *Pyramidula alternata*, *Omphalina (Zonites) fuliginosus* and *inornatus*. Of water snails there were *Goniobasis livescens*, *Pleurocera subulare*, and *Melantho decisa*, but only the latter may have been used for food purposes. On one village site in Wilmot township were found, between the fragments of a pot, a quantity of carbonized pieces of grass stems and quite a number of shells of *Omphalina fuliginosus*, which seems to indicate that this species was esteemed a choice delicacy. An article in a former report mentions the following shells as occurring in kitchen-middens and débris heaps in York county": *P. albolabris* and *P. palliata*, *Stenotrema monodon*, a species of *Succinea*, *Planorbis trivolvis* and *P. bicarinatus*, *Limnæa stagnalis*, *modicellus*, and *palustris*, *Physa heterostropha*, *Melantho decisa*, and *Goniobasis livescens*.

The presence of the shells of the land snails may also be quite accidental, as they occur principally in the subsoil, and therefore may have been brought from the surface by the plow.

All of the above-mentioned species perhaps made welcome variations in the dietary of the Indians. In any event, failing other kinds of food, it is reasonable to suppose that they would finally have recourse to snails; although the Neutrals and Hurons, from what is said of the abundance of all kinds of game in their country, probably were never reduced to want.

We also know almost nothing as to the method of preparing shell-fish for food. Brickell, who is about the only early writer that makes any reference of the kind, says of the mussels: "They are only made use of by the *Indians*, who eat them after five or six Hours' boiling to make them tender."[2] He also states that some species were dried.[3] The natives of the Atlantic coast, according to Rau, "Used to string these mollusks [*Venus mercenaria*] and to dry them for consumption during winter."[4] These methods may also have been followed by the tribes of the interior.

II. Shells in the Domestic Arts and Manufactures.

Cups.

Apart from their use as food, perhaps one of the earliest uses to which mollusks were applied was that of domestic utensils. Vessels for holding liquids and also for conveying liquid foods to the mouth are one of the primary requirements of man. Being very conveniently shaped, many of the larger shells formed natural cups. "Haywood, Hakluyt, Tonti, Bartram, Adair and others," writes Holmes, "mention the use of shells for drinking vessels, and," he adds, "in much more recent times Indians are known to have put them to a similar use."[5] According to the old

[1] *Primitive Industry*, opp. cit.

[2] John Brickell: *The Natural History of North Carolina* (Dublin, 1737), p. 249.

[3] *Ibid.*, pp. 288 and 367.

[4] Charles Rau: "Ancient Aboriginal Trade in North America," *Annual Report of Smithsonian Institution* for 1872, p. 379.

[5] P. 193.

Spanish chronicles, Montezuma used cups of "natural shells richly set with jewels." The Indians of Arizona also used large sea shells as drinking vessels.[1]

Father Allouez, in the *Relation* of 1669-70, writing of some of our northern Indians, says: "The savages of this region are more than usually barbarous; they are without ingenuity and do not know how to make even a bark dish or a ladle; they commonly use shells."[2]

There are several large shells of the *Busycon perversum* in the Museum, from which the interior columns have been skilfully removed, and these, we have no reason to doubt, were used as vessels for culinary purposes. There is also a smaller specimen which may have served as a cup, and this we present in figure *a*, plate VI. It has a small perforation through the lip.

These shell cups even formed the prototypes of some vessels of clay, found in the South, of which Thurston gives two illustrations in his *Antiquities of Tennessee*.[3]

Spoons.

Some species of shells were also commonly used as spoons. Benjamin Thompson refers to this use in the prologue to his *New England's Crisis*, (1676):

> "The times wherein Old Pompion was a saint,
> When men fared hardly, yet without complaint,
> On vilest cates, the dainty Indian maize,
> Was eat with clamp shells out of wooden trays."

Beverly, too, informs us that the Indians of Virginia used large cockle-shell spoons. He observes, in language more quaint than elegant perhaps, that "The Spoons which they eat with, do generally hold half a pint: and they laugh at the *English* for using small ones, which they must be forc'd to carry so often to their Mouths, that their Arms are in danger of being tir'd before their Belly."[4] According to Hoffman, the Menomini Indians formerly used mussel-shells as spoons, and they were in use even up to recent years, when necessity demanded.[5] Schoolcraft also mentions their use for this purpose.[6]

Many of our own fresh-water bivalves are admirably adapted for the purpose, the half-shells being used in the unaltered state. Of these there are in the Provincial Museum *Unio luteolus*, *U. complanatus*, *Margaritana marginata*, *U. ligamentinus*, *U. ventricosus*, and *U. ulatus*. Among them there is a right valve of *U. luteolus*, which is very much discolored, and looks as if it had contained some oily substance. It and a left valve of *U. complanatus* (also showing oily discoloratious) were taken from a grave near Old Fort Ste. Marie, in Simcoe County

In Tennessee and Kentucky *Unio* shells were cut so as to form a handle on one side. Special attention must be called to the interesting fact that these shells were nearly all made from left valves, which, as Holmes says, "Gives such a position to the handle that they are most conveniently used by the right hand, thus indicating right-handedness on the part of these

[1] *Antiquities of Tennessee*, p. 309.
[2] Burrows' Edition of the *Jesuit Relations* (Cleveland, Ohio), Vol. 54, p. 207.
[3] P. 311.
[4] *History of Virginia*, Book III., p. 17.
[5] The Menomini Indians, *Fourteenth Annual Report Bureau of Ethnology*, p. 257.
[6] *History, Condition and Prospects of the Indians of the United States* (Philadelphia, 1857), Vol. 6, p. 109.

people."[1] He states that there are only two left-handed specimens in the U. S. National Museum. Professor Putnam finds that over thirty examples in the Peabody Museum are so shaped as to be used by the right hand.[2] We cannot be certain as to how many of the *Unios* in the Museum were, if at all, used as spoons, and, consequently, also, whether they had been intended for use with the right or left hand. This is all the more difficult to determine, owing to the fact that none of them has been altered in any way. Both valves of some species could be held equally well, and perhaps used just as conveniently too, with either hand.

Knives.

Among the many economic uses of shells is that of cutting instruments. The sharp-edged *Unios* and *Anodontas* no doubt were often made to perform this office, for it is reasonable to suppose that if cutting was done with flint or chert knives (often with dull edges) shells could be made to cut just as readily. Indeed, in some of the accounts of the Indians given by early writers, we find allusions to shell knives. Kalm, writing of the Indians of New Jersey, says: "Instead of *knives* they were satisfied with little sharp pieces of flint or quartz, or else some other hard kind of stone, or with a sharp shell, or with a piece of bone which they had sharpened."[3] Henry Hudson, speaking of some Indians he met during his first voyage, and the preparations they made to entertain him, says: "They likewise killed a fat dog and skinned it in great haste with shells which they had got out of the water."[4] The last part of this reads as if the knives had been hastily improvised—in fact, had just been taken from the water for the purpose. Beverly states that before the Virginia Indians were supplied with metallic tools "Their Knives were either Sharpened Reeds or Shells, and their Axes sharp Stones bound to the end of a Stick, and glued in with Turpentine. By the help of these they made their Bows of the Locust tree."[5] The Menomimi Indians used clam-shell knives.[6]

"A number of authors mention the use of shells as scalping knives."[7] And in Bressani's *Relation* (1653), we read of shells being used in torturing a prisoner. "To cut off Guillaume's right forefinger," he says, "a barbarian used, not a knife, but a shell, like a saw; which could not cut the tough and slippery sinews; and therefore he tore it off by sheer force."[8] Strachey asserts that when Powhatan "would punish any notorious enemye or trespasser, he caused him to be tyed to a tree, and with muscle-shells or reedes the executioner cutteth off his joints one after another, ever casting what is cut of into the fier; then doth he proceede with shells and reedes to case the skyn from his head and face."[9]

Another interesting reference to the use of shell knives, which occurs in Brickell's *The Natural History of North Carolina*, may be mentioned.

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[1] "Art in Shell," p. 199.

[2] *Eleventh Annual Report Peabody Museum*, p. 295; *footnote*.

[3] *Travels into North America* (London, 1771), Vol. II., p. 39.

[4] De Laet's "Discovery of the New Netherlands," quoting Hudson's narrative; *Collections of the New York Historical Society* (Second Series, 1841), Vol. I., p. 300.

[5] *History of Virginia*, Book III., p. 60.

[6] Hoffman, opp. cit., p. 257.

[7] Holmes: "Art in Shell."

[8] Burrows' Edition, Vol. 37, p. 195. Father Isaac Joques in the *Relation* of 1647, also says: "They, [the Iroquois] used a scallop or an oyster-shell for cutting off the right thumb of the other Frenchman, to cause him more pain." (Vol. 31, p. 45.)

[9] *The Historie of Travaile into Virginia Brittannia*, etc. (Hakluyt Society, London 1849). P. 52.

It is as follows: "They cut the Arms of the young Girls with sharp *Shells* of *Fishes*, 'till the Blood follows, which they cast into the Air, with loud Shreeks and Cries."[1] This was done at one of their ceremonial feasts.

It is said that the Indians of Vancouver's Island still carve their wooden sepulchral images with knives made of shell.

Professor Holmes figures a perforated valve of *Unio gibbosus*,[2] probably used as a knife or scraper, from Tennessee. Specimens of *U. complanatus*, similarly perforated, are to be seen in the Laidlaw collection from Victoria county. There are no less than nine of these with holes through the sides, and all still retaining their sharp edges. These may have been utilized as cutting tools, the holes perhaps serving for the attachment of handles, although these were really not necessary.

Razors and Tweezers.

Another and a more novel use to which these clam shells may have been put, although we have no direct evidence that the Ontario Indians used them in this way, is that of razors for cutting off or of tweezers for pulling out the hair. We know that among some savages, *e.g.*, the Fiji Islanders, sharp clam shells were used as razors, and some of the early explorers of the Atlantic coast of America make mention of a similar employment of shells. Thus, Strachey, writing of the Virginia Indians, says: "The men shave their hair on the right side very close, keeping a ridge comonly on the toppe or crowne, like a coxcomb; for their women, with two shells, will grate away the haire into any fashion they please."[3] A more painful proccess was to pluck the hair out by the roots, using two valves of a clam as tweezers. Adair says that among the Choctaws "both sexes pluck all the hair off their bodies, with a kind of tweezers, made formerly of clam-shells."[4] The Virginia Indians, according to Beverly, "puil their Beards up by the roots with a Muscle-shell; and both Men and Women do the same by the other parts of their Body for Cleanliness sake."[5] And, coming nearer home, Heckewelder says of the Pennsylvania Indians: "Before the Europeans came into the country, their apparatus for performing this work, consisted of a pair of muscle shells, sharpened on a gritty stone, which answered very well, being somewhat like pincers."[6] With these they not only pulled out the hair of their beards but of their foreheads also.

In Pottery Making.

Most of our *Unios* seem to have been employed in the manufacture of pottery both as smoothers and scrapers; at least there is no other aboriginal industrial art to which we could assign implements like figures *a*, *b*, *c*, *d* and *e*, plate VII.

The first two of these figures represent shells used as "slicks" for smoothing the inside of clay vessels while in a plastic state, much in the same way as certain smooth stones were employed by the Indians of southern California. Figure *a* is a right valve of *Unio alatus*, which was used until

[1] P. 334.
[2] Figure I., Pl. XXVII., "Art in Shell."
[3] Strachey, opp. cit., p. 66.
[4] *History of the American Indians*, etc. (London, 1775), p. 6.
[5] *History of Virginia*, Book III., p. 2. (See also Captain Smith's, "The General History of Virginia, New England and the Summer Isles."; *Pinkerton's Voyages*, Vol. 13, p. 34.)
[6] "History, Manners and Customs of the Indian Nations, who once inhabited Pennsylvania," etc., *Pennsylvania Historical Society Memoirs* (Philadelphia, 1881), Vol. 12, p. 205.

a large hole appeared in the side. It appears to have been held in the right hand while in use. This specimen is fully 4½ inches long. It was obtained near Brantford, in Brant county. In figure *b* we have a left valve of the same species, found on a village site in Eldon township, Victoria county. It was employed in the same way, a large part of the surface of the shell having been brought into play, and it shows evidence of being used with the left hand. The posterior portion is cut away ; but this may also be the result of long service as a scraper.

Besides these, the Museum collection includes specimens of *U. ventricosus*, *U. complanatus*, *U. gibbosus*, *U. plicatus* and *U. ligamentinus*, all of which were similarly employed. Some of them offer evidence of left-handedness. There are eleven left valves of which only five were used with the right hand ; and thirteen right valves, six of them being used with the left hand ; two could have been held in either hand, and the remaining five were most conveniently held with the right. It is among the scrapers, however, that we find the most evidence of right-handedness.

Figures *c*, *d* and *e*, plate VII., represent shells probably used as scrapers in smoothing and otherwise shaping the interior and exterior portions of clay pots. The sharp points may have been serviceable in forming the sharp angles of the overhanging rims. These sharpened portions are always on the posterior ends of the shell, and were not made so designedly, but are the result of continual use—the gritty nature of the tempering material, commonly used in pottery, accounting for the wearing away of the shell. There are also some that are not pointed ; the posterior and anterior ends and lower edges having been brought into play ; these portions being rounded and worn from long use. A fragment (apparently of *U. luteolus* or *Margaritana costata*), in the writer's collection, is worn down almost to the pallial impression. Pieces of *M. rugosa* were found in Whitchurch township, York county, which may have been used as scraping tools.

Many of these specimens show that their users were right-handed. In figure *c*, plate VII., we have one which was held in the left hand. It is a right valve of *U. rectus*, 3½ inches long, and comes from Fairchild's creek, near Brantford. Figure *d* represents a smaller one of the same species, but this is a left valve, used with the right hand. A right valve of *U. ligamentinus* is shown in figure *e*. It is not so sharply pointed as are some others made of this species ; in fact, only the lower edge was utilized, and it was held in the left hand. This specimen was found near Clearville, in Orford township, Kent County. Including these, there are in the collection eight right valves used with the left, and thirteen left valves used with the right hand. There is only one left valve intended for use with the left hand, and this is a fragment of *U. gibbosus*, in the writer's collection. Two other shells, a right and left valve, could have been held in either hand. The fact that when a left valve was utilized it was held in the right hand, and *vice versa*, might be taken as an indication of ambidexterity on the part of the users.

The utilization of finely pulverized shell as a tempering material for pottery must also be mentioned here. Dumont in his *Historical Memoirs of Louisiana*, says "that, having amassed the proper kind of clay and carefully cleaned it, the Indian women (of Louisiana) take shells, which they pound and reduce to a fine powder ; they mix this powder with the clay, and, having poured some water on the mass, they knead it with their hands and feet, and make it into a paste." [1]

[1] Dumont's *Memoirs* (1753) Vol. II., p. 271 ; *apud* Thurston.

There are several pottery fragments in the Museum in which this tempering material was used; but, as Mr. Boyle says, "Our Indians used burnt gneiss and granite even more frequently than shells"[1] for this purpose. The clay of which pipes are made undoubtedly contains a good deal of this shell tempering material.

In Tanning.

The *Unio* shells were also very well adapted for use in tanning. We know that other shells were often employed for the purpose; Brickel, for instance, mentions oyster shells. With these they worked the skins until they were dry, "by which means," he says, "they became soft and pliable."[2] Hoffman states that mussel-shells are "sometimes used for scraping deerskin in tanning."[3]

As Scrapers in Woodworking.

Another probable use is that of scrapers for smoothing bows and the shafts of arrows, and for hollowing out the wooden canoes. Strachey tells us that the bows of the Virginia Indians "are of some young plant, eyther of the locust-tree or of weech, which they bring to the forme of ours by the scraping of a shell."[4]

There is in the Museum a piece of *Unio* shell (figure *a*, plate VIII.), from Brant county, provided with a rounded notch which is quite sharp edged and slightly bevelled. If this is not an accidental fracture, and we are inclined to think that it is not (the specimen is a little weathered, thus obliterating traces of use), it may have been put to some practical use—perhaps for scraping arrow-shafts, for which purpose it is well adapted.

The author just quoted,[5] Saavedra,[6] Kalm,[7] Smith,[8] Hariot[9] and Wood mention the use of shell-scrapers in the manufacture of wooden boats. The latter gives an interesting account, which is as follows: "Their *Cannows* be made either of Pine-trees, which, before they were acquainted with *English* tooles, they burned hollow, scraping them smooth with Clam-shels and Oyster-shels, cutting their out-sides with stone-hatchets."[10] Hariot says that the Virginia Indians first took off "the barke with certayne shells."

Fish Hooks.

"The use of shell in the manufacture of fishing implements," says Professor Holmes, "seems to have been almost unknown among the tribes of the Atlantic Coast, and with the exception of a few pendant-like objects, resembling plummets or sinkers of stone, nothing has been obtained from the ancient burial mounds of the Mississippi valley."

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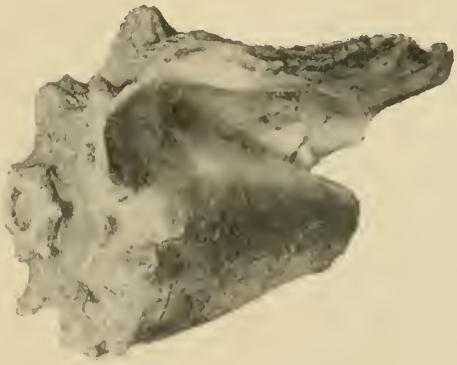
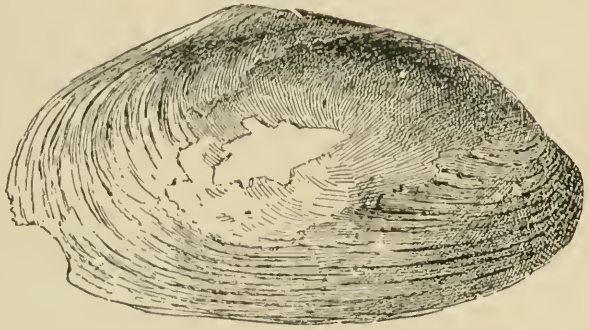
[1] David Boyle: *Notes on Primitive Man in Ontario*, p. 28.
[2] *The Natural History of Carolina*, p. 365.
[3] "The Menomimi Indians," p. 257.
[4] P. 105. See also Capt. John Smith's account, *Pinkerton's Voyages*, Vol. 13, p. 35.
[5] P. 75.
[6] *Apud* Prof. Fritz Schultze: "Origin of the Culinary Art," in *Kosmos* (1878.)
[7] *Travels into North America*, Vol. II., p. 38.
[8] Opp. cit., p. 35.
[9] *The True Pictures and Fashions of the People in that Parte of America Now called Virginia*," etc. (Quaritch reprint, London, 1893.)
[10] *New England's Prospect* (published by the Prince Society, Boston, 1865), p. 102.

a. Shell Cup.

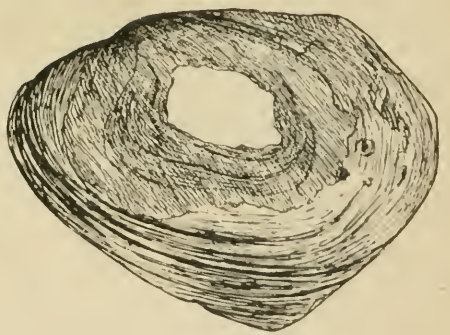


b. Shell Trumpet.



a.

e.



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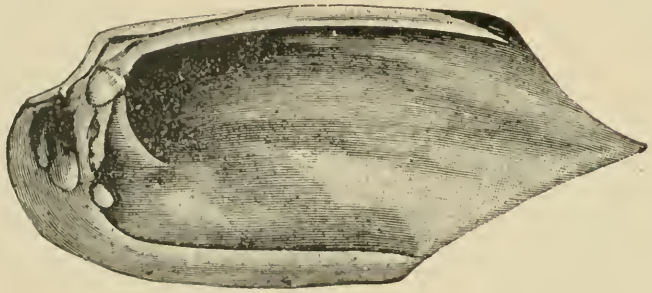
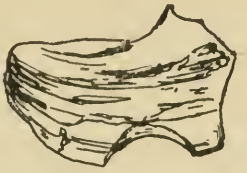


c.

d.

UNIO SHELL POLISHERS AND SCRAPERS.



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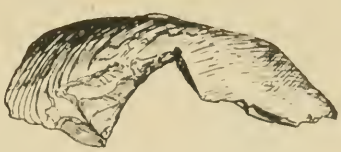

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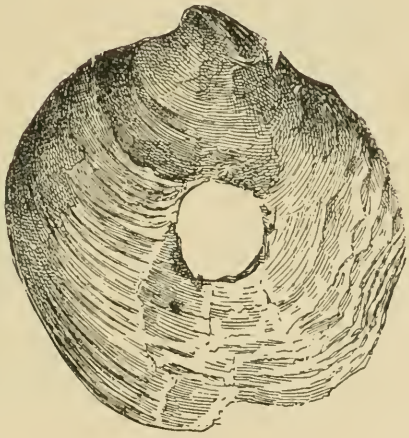

d.

c.

e.

g.

f.

h.

SHELL IMPLEMENTS AND BEADS.

a. Shell scraper.
b. Shell implement (*U. gibbosus*).
c. Fish hook (?)
d. Unio shell hoe from Ohio.
e. Bead (*Melantho decisa*).
f. Bead (*Pleurocera subulare*).
g. Bead (*Limnæa catascopium*).
h. Bead (*Marginella conoidalis*).

a.

b.

c.

d.

e.

f.

j.

i.

k.

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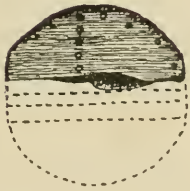
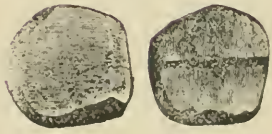
n.

h.

l.



m.



o.

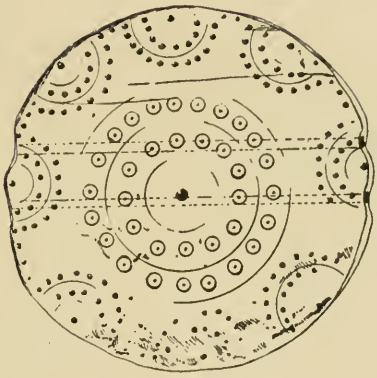
SHELL BEADS.

a.

b.

c.

d.



e.

f.

g.

k.

h.

i.

j.

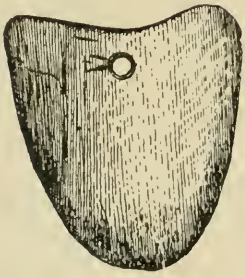
PENDANTS.

a, *b*, *g*, *h*, from unio shell.
c, *d*, *f*, *i*, *j*, *k*, from conch shell.
e. Large form of "runtee" bead.

a.

c.

b.



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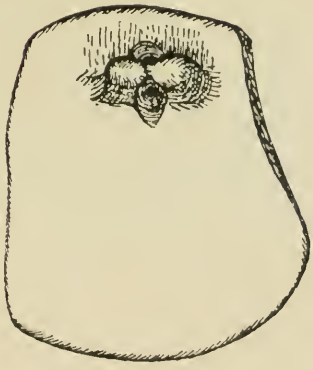
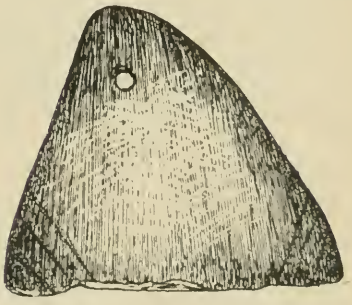


e.

g.



f.

PENDANTS AND GORGETS.

a.

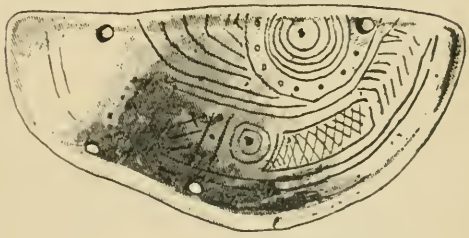
b.

c.

d.

e.

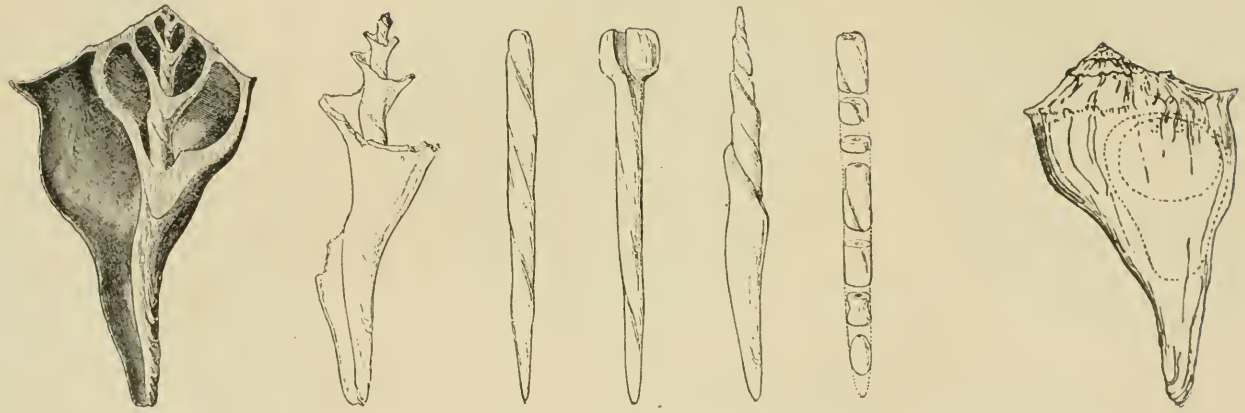
g.



f.

SHELL ORNAMENTS.

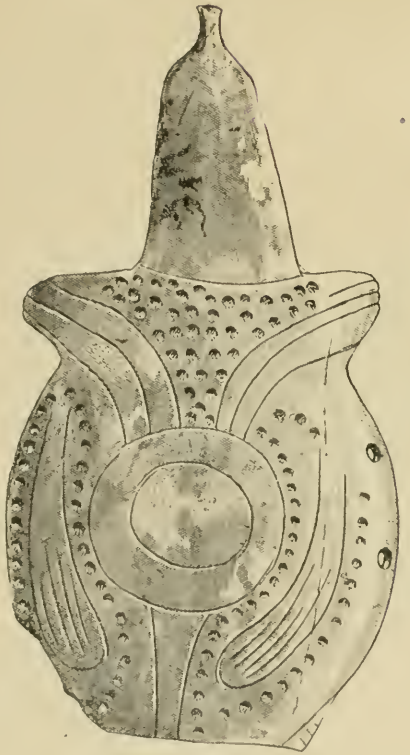
a, *b*. Perforated shells of *Fulgur perversum*.
c. Perforated shell of *Fulgur pyrum* (?).
d. Perforated shell of *Strombus* (sp.?).
e. "Rattlesnake" shell gorget from Tennessee.
f. "Rattlesnake" shell gorget from Ontario.
g. Shell "pin."



a. *b.* *c.* *d.* *e.* *f.* *g.*

SHOWING THE DERIVATION OF SHELL OBJECTS FROM BUSYCON SHELL.
(After Holmes' Plate XXIX).

a. Showing the interior of shell.
b. The columella.
c. Roughly dressed pin derived from columella.
d. Completed pin.
e. Pin pointed at both ends.
f. Illustrates the manner of dividing the cylinders into sections for beads.
g. Shows derivation of shell breast-plates or gorgets.



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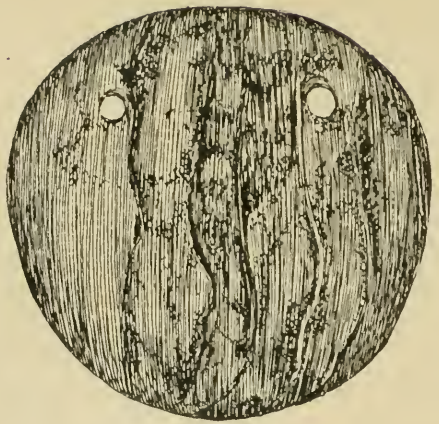

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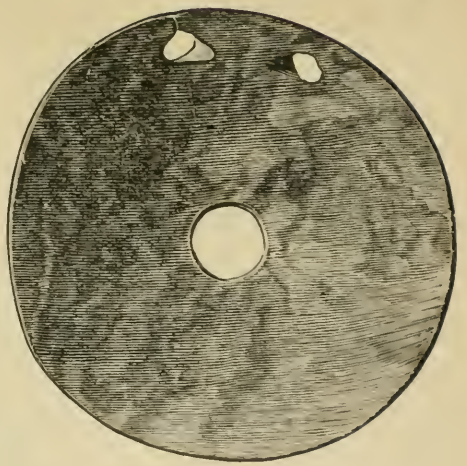

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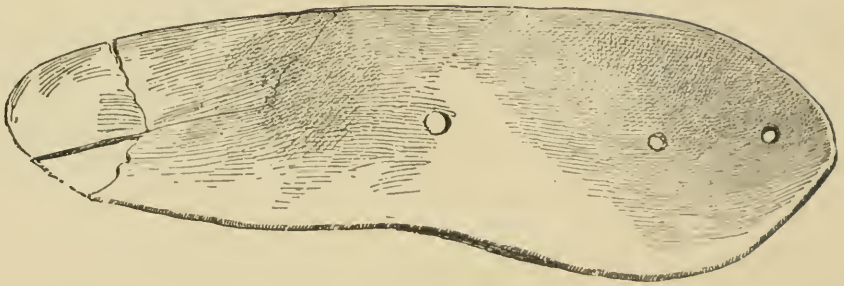
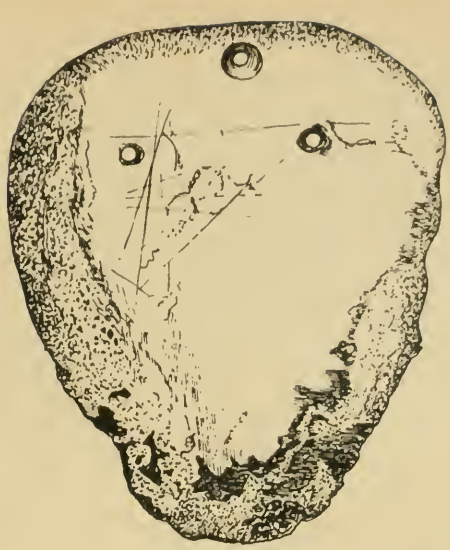
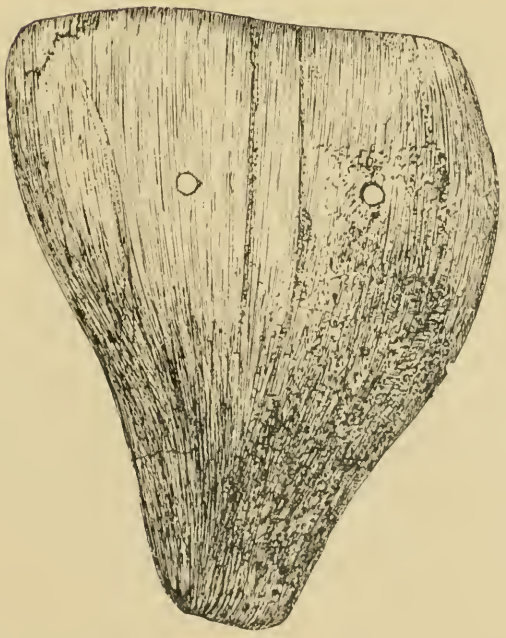


d.

SHELL GORGETS.



a.



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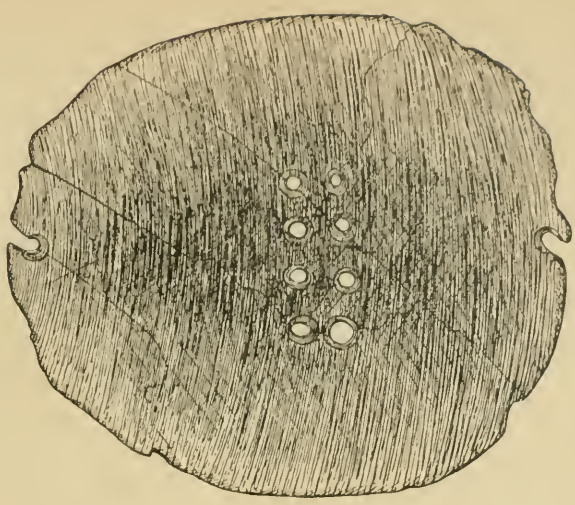
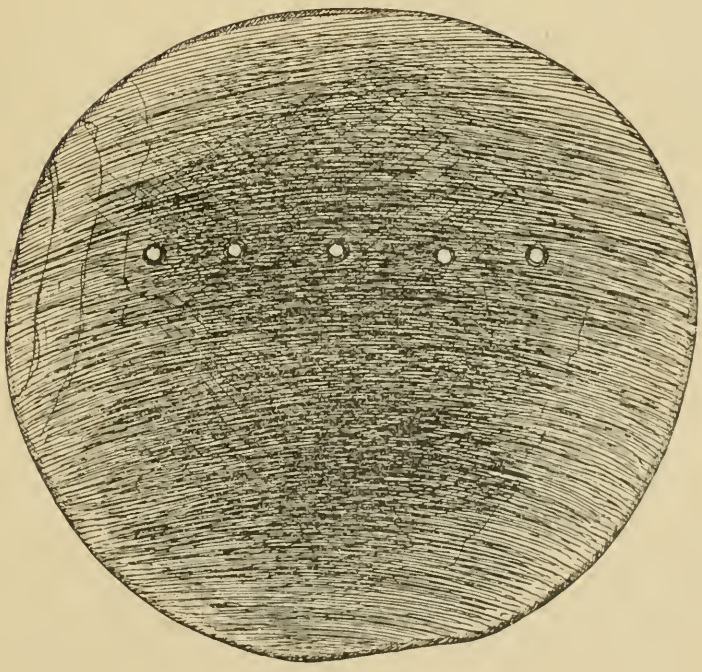
SHELL GORGETS.

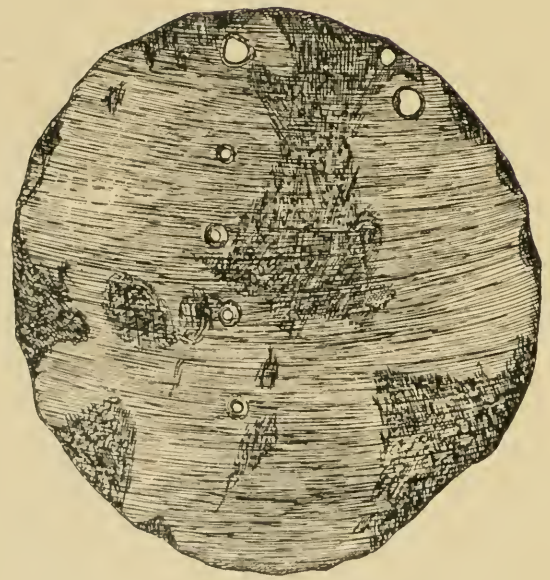


a.

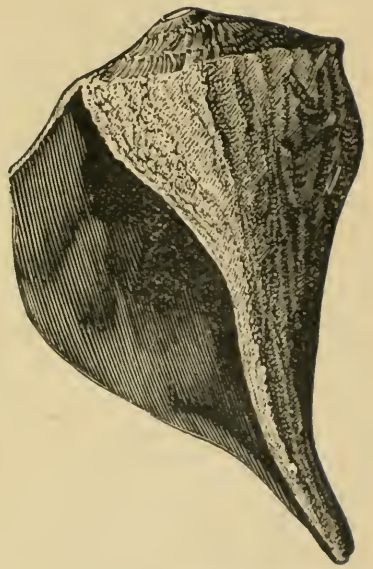


b.

SHELL GORGETS OR BREAST-PLATES.



a. Shell Gorget.



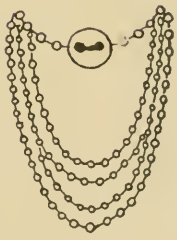
b. Shell of *Busycon perversum*.

SHELL OBJECTS.

a.

b.

c.



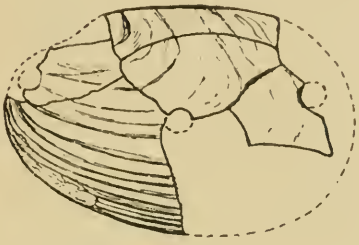
d.

a. Necklace, from Lafitau, showing manner of wearing gorgets.
b. " " " " " " " "
c. Indian boy with necklace of "Runtee" beads, from Beverly.
d. Necklace, from Beverly, showing manner of wearing breast-plates.
a, *b* and *c* are after Holmes' Plates XLV. and XXXVI.

a.

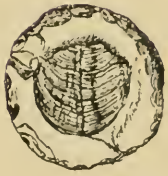
b.

c.

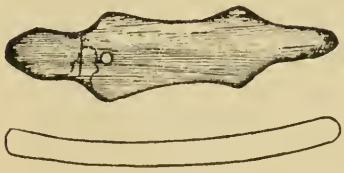


e.

d.



f.



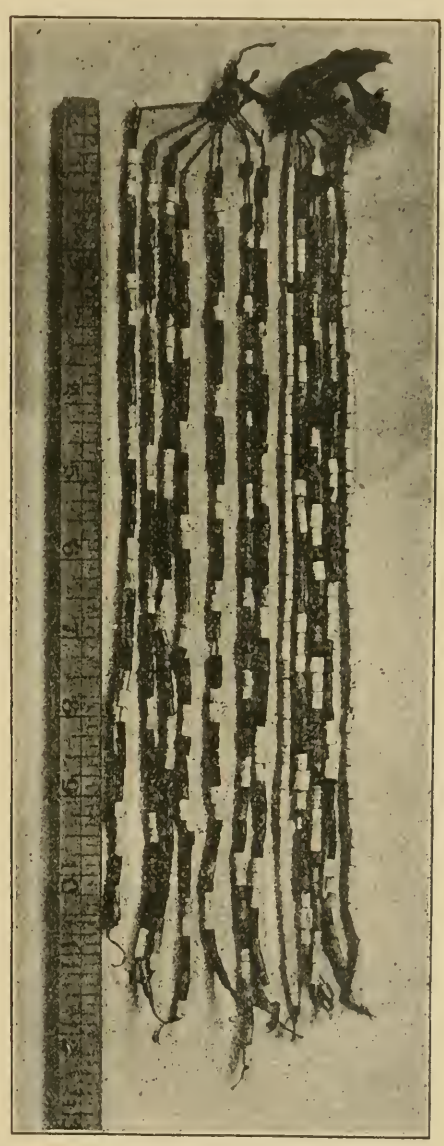
g.

h.

i.

j.

ORNAMENTS MADE OF SHELL.



Wampum Strings.

Bone fish hooks have been found in Ontario, so there is no reason why they should not also be made of shell. In figure *c*, plate VIII., we have a specimen which, if we may judge from its shape, was used as a fish hook ; although it may also be only a mere whimsical form of pendant ornament. Similar hooks are said to be used by some tribes to secure the ends of strings of beads.[2] This specimen is made of a piece of tropical shell in which exfoliation has commenced, and it is now very fragile. Its proportions are : length, $\frac{11}{16}$ of an inch ; width, $\frac{9}{16}$, and it is about $\frac{1}{16}$ thick. The point seems to have been much longer ; we have supplied a conjectural restoration. This interesting object comes from lot 10, concession 3, Onondaga township, Brant county.

Shell Trumpets.

The classic story of Triton, the trumpeter of Old Neptune, blowing through a shell to produce the roaring of the waves, mythic fancy though it was, nevertheless seems to show that the ancients knew that certain shells (especially the genus named after the above-named fabled demigod), by removing the tip of the whorl, made excellent trumpets. It is well known that among the savage cannibals of the far-distant Pacific Islands, shells were used to call the warriors to battle. And even not so very long ago many a New England laborer was summoned to dinner from the distant hay-field by the deep, metallic note emitted by one of these primitive instruments. The Indians, likewise, made use of shell trumpets. Bartram says : " On one and the same day, early in the morning, the whole town is summoned by the sound of a conch-shell, from the mouth of the overseer, to meet in the public square."[3] Professor Wyman, from whose article this interesting quotation was obtained, adds that this was " for the purpose of entering upon the work of cultivating the soil."[4]

The latter writer figures a conch-shell with a large hole in the side, which he thinks may have been a trumpet similar to the one referred to by Bartram.[5]

Another allusion to the use of a conch-shell trumpet by the Indians, occurs in the *Pennsylvania Archives*. Dr. Beauchamp, in a letter to the writer, mentions this reference. He says : " Shell trumpets were not used by the N. Y. Indians in early days—at least not in the interior, but there is a record of their use in 1791. Col. Proctor was at the Upper Cornplanter, then called New Arrow's town by some—on the Alleghany River—and said : 'April 19th—O'Beel and chiefs arrived here from the lower town, and ordered their conch-shell to be sounded through the village, to summon the head men into council.'[6]

" This was unusual, however, and at Buffalo Creek, May 15th, 1791, he said, 'the alarm gun was fired, which was the signal to call their head men into council.' At that time the Onondagas here were called together by the horn of *Kakiktoto*. At an earlier day, after the flight of the French colony, the bell was taken to Onondaga, and used to call meetings for state and church. The earlier mode, when their towns were compact, was to call meetings or make proclamations by the town crier."

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[1] "Art in Shell," p. 208.
[2] *Ibid.*, p. 209.
[3] *Travels in Florida* (Philadelphia, 1791), p. 512.
[4] "Fresh-water Shell-Heaps of St. John's River, East Florida," *American Naturalist*, Vol. II. (1869), p. 453.
[5] *Ibid.*, plate X.
[6] *Pennsylvania Archives*, 2nd Series, Vol. 4, p. 577.

In figure *b*, plate VI., we have a shell of the Giant Conch (*Strombus gigas*), which was, up to the time when it was acquired by the Provincial Museum, used by the Senecas of the Six Nations Indian reserve, in Brant county, to call the people to the Long House. The tip of the shell has been removed to form the mouth-piece. It is said that the notes produced could be heard at a distance of nearly two miles; but, however this may be, we have not yet seen any one who could produce a sound approaching this in volume. Other than forming the mouthpiece the shell has not been altered—the breaks shown on the lip being the result of accident.

Other Utilities.

We have no record of any shell hoes being used by the Ontario aborigines, although Wood [1] and other writers [2] mention their use in the New England States. Neither have we any shell specimens that could have been utilized for the purpose. In Ohio perforated shells of *U. plicatus* (figure *d* on plate VIII. shows one of these in our cases) were used, and of this species several were found in Ontario; but not one of them is provided with a hole for the attachment of a handle ; in fact, the specimens we have, are, with one exception, mere fragments.

The writer found several tools made of *U. gibbosus*, like figure *b*, plate VIII., on two prehistoric village sites in Waterloo county. At first sight they appear to be the mere result of an adventitious fracture, but we are quite positive that they were made in the course of some mechanical operation, whatever it may have been. The example illustrated is a right valve, and was first used as a pottery smoother. The notch appears to have been made so by design, but what utility there could have been in this we can only conjecture ; that it had a purpose, however, can not be denied. We have a smaller specimen (No. 24,168 in the writer's collection) in which the notch is more rounded and the edges also are slightly polished, as if it had been used for smoothing purposes.

In the *Jesuit Relations*[3] mention is made of arrowheads of shell, but no objects of the kind, fashioned from this material, have been found in Ontario.

We will now pass on to the consideration of

III. Shells Used as Ornaments.

The love of ornament manifests itself in the lowest stages of human development, and in the gratification of this taste shells were extensively used the world over. Our own aborigines, influenced by the same natural appreciation of the beautiful, were also not slow to recognize the utility of shells in personal adornment.

Shell was also probably a favorite material on account of being a product of the sea. Primitive man everywhere regarded the sea as a magnificent display of the power of their chief deity, and so it was also quite natural for them to regard the shells rolled up from its depths as bearing a part of the mysterious power of this deity. The peculiar roaring sound made by sea-shells when held to the ear was likewise a great mystery to them, and increased the reverence with which shells were

[1] *New England's Prospect*, p. 106.

[2] *Mass. Historical Society Collections*, Vol. VII., p. 193.

[3] Vol. 15, p. 245.

regarded by most inland tribes. In fact, "we find no Indian tribe," as Kohl says, "however deep it might dwell in the interior, of which the first Europeans did not mention their high respect for sea-shells."[1] He attempts to account for this reverence in this wise: "There is no doubt, I think, that historic reminiscences are connected with this shell worship—recollections of that great water from which the ancestors of the Indians and the founders of their religion probably stepped on shore."[2] According to Long, the Omaha Indians had in their possession, about three-quarters of a century ago, a large shell which had already been transmitted from generation to generation, and to which they paid a great deal of veneration. It was considered so sacred that a skin lodge or temple was appropriated for its preservation. In this lodge a person charged with the care of it resided constantly. It was never allowed to touch the earth, and any one who impiously set eyes on it became blind. This shell was always taken along on their national hunting expeditions, and it was also consulted as an oracle.[3] The shells of *Busycon perversum*, on account of being sinistral, *i.e.*, having the mouth aperture turned to the left, no doubt were also regarded as sacred. Indeed, Dr. Wilson thinks they "closely corresponded to the *Conopas*, or rude Penates of the Peruvians, as described by Rivero and Von Tschudi,"[4] which were, as were the *Busycons*, buried with their owners.

It is quite natural to suppose that any ornament made of sea-shell would likewise be invested with mystic and protective powers, and would be worn primarily as an ornament or charm, and finally, perhaps, losing this significance, the wearing of it for purely decorative purposes became more general; just as much of the jewellery of the civilized races of to-day was once supposed to exert a talismanic influence.

Having a supposed remedial efficacy would also result in some species being used for amulets or charms, ornamental in character. "The most peculiar Commodity belonging to this Country," says an old writer, "is a Kind of Shell-Fish, call'd *Esurgnuy*, extraordinary white, and of singular Virtue for stenching of Blood; for which end they make Bracelets of them; not only for their own Use, but to vend of others."[5] Cartier, also, who first makes mention of this *esurgnuy*, and whose words we present in the quaint phraseology of the translator Hakluyt, says:—"Of them they make beads, and use them even as we doe gold and silver, accounting it the preciousest thing in the world. They have this vertue in them, they will stop or stanch bleeding at the nose, for we proved it."[6]

The Indians were very fond of loading themselves with all sorts of ornaments. Wood, speaking of the Indians of New England, says: "Although they be thus poore, yet is there in them the sparkes of naturall pride, which appears in their longing desire after many kinds of ornaments, wearing pendants in their eares, as formes of birds, beasts, and fishes carved out of bone, shels, and stone, with long bracelets of their curious Wampompeag and Mowhackees, which they put about their necks and loynes."[7] William Penn, in a letter written to his friends in England,

[1] *Kitchi Gami* (London, 1860), p. 136.
[2] *Ibid.*
[3] Long, *Expedition from Pittsburg to the Rocky Mountains*, etc. (London, 1823), Vol. II., p. 47; *apud* Rau.
[4] "Some Ethnological Aspects of Conchology," *The Canadian Journal* (Second series, 1858), Vol. III., p. 406.
[5] *The Four Kings of Canada* (London, 1710), reprinted, London, 1891.
[6] Quoted by Dawson, *Fossil Men* (Montreal, 1880), p. 32.
[7] *New England's Prospect*, p. 74.

says: "They wore ear-rings and nose-jewels; bracelets on their arms and legs, rings on their fingers, necklaces made of highly polished shells found in their rivers and on their coasts. The females tied up their hair behind, worked bands round their heads, and ornamented them with shells and feathers, and wore strings of beads round several parts of their bodies. Round their mocasins they had shells and turkey spurs, to tinkle like little bells as they walked."[1]

Describing the decorations of the Hurons, Father François du Peron states: "Around their necks and arms bead necklaces and bracelets of porcelain; they also suspend these from their ears, and around their locks of hair."[2] Several other writers mention the latter custom, *i. e.* of decorating the hair.[3]

The custom of suspending ornaments from the lobe of the ear was a common one; but in the *Relation* of 1657–58 (Vol. 44, p. 289), it is stated that "Not only the lobe of the ear is pierced, but also the cartilage or rim, which the women are wont to hang with bits of shell called porcelain." The Abnaki Indians, according to the *Relation* of 1652–53, "wore sticks of wampum in their ears, which are pierced with such very large holes as easily to receive a great stick of Spanish wax."[4] Loskiel tells us that "Some Indians bore a hole through the cartilage of the nose, and wear a large pearl, or a piece of silver, gold, or wampum in it,"[5] and this practice is also referred to in the quotation from Penn, given above.

Besides gratifying their personal vanity by the use of bracelets, necklaces, etc., some Indians wore a sort of crown, composed of shell-beads. "The People of Condition of both Sexes," says Beverly, "wear a sort of Coronet on their Heads, from 4 to 6 inches broad, open at the top, and composed of Peak or Beads, or else of both interwoven together, and workt into figures, made by a nice mixture of the Colours."[6] Evidence is not wanting of the use of similar head-dresses among the Iroquois and our Canadian Indians. Brébeuf, in a letter to Le Jeune, speaks of an Iroquois prisoner among the Hurons who "was dressed in a beautiful beaver robe and wore a string of porcelain beads around his neck, and another in the form of a crown around his head."[7] Le Jeune,[8] himself, speaks of a Canadian Indian who "went to France and was very well received by his Majesty, at whose feet he laid his crown of Porcelain beads, as a sign that he recognized that great Prince, in the name of all these nations as their true and lawful monarch."

Beads.

These were the most common kind of ornaments among some tribes. Father Rasles, writing of the Abnaki Indians (in 1723), says: "If you wish to see him in all his finery, you will find he has no other ornaments

[1] Quoted by Israel Worsley, *A View of the American Indians*, etc. (London, 1828), pp. 65-66.

[2] *Relation* of 1638–39, Vol. 15, p. 155.

[3] Loskiel, *History of the Mission of the United Brethren among the Indians of North America* (London, 1794), p. 48; *Relation* of 1657–58, Vol. 44, p. 287; Father Nau's *Relation*, Vol. 68, p. 265, and Vol. 70, p. 95; and Beverly, Book III., p. 2.

[4] Vol. 40, p. 207 (Burrows Ed.)

[5] Loskiel, p. 49.

[6] *History and Present State of Virginia*, B. III., p. 2. In plate 3 Beverly shows an Indian wearing one of these "Coronets," and on plate 5 is a young woman with the same head-gear.

[7] Le Jeune's *Relation*, Vol. 13, p. 39. [8] *Ibid.*, Vol. 15, p. 223.

but beads."[1] The Indians were sometimes most lavish in the use of these objects. In the *Relation* of 1644–45 we read of Kiotseaeton, an Iroquois Indian who had come to negotiate peace with the French, as being "almost completely covered with Porcelain beads."[2] According to Dawson, Champlain says "the Huron girls accumulated strings of wampum for their dowry, and lavishly adorned themselves with it on occasions of festivity."[3]

Enormous quantities of beads have been found in graves and mounds. In the Grave Creek mound of Virginia, for instance, between three and four thousand were discovered. Professor Holmes, commenting on this find, says: "This number will, however, appear very insignificant when compared with a collection such as the costume of the great King Philip could have furnished. Drake," he says, "relates that Philip had a coat 'made all of wampampeag,' which, when in need of money, he 'cuts to pieces, and distributes it plentifully among the Nipmoog sachems and others as well to the eastward as southward, and all round about.'[4] By adding to this store of beads the contents of two belts, one of which was nine inches in breadth, and so long that when placed upon the shoulders it reached to the ankles, we conclude that the greatest collection ever taken from a prehistoric mound could not compare for a moment with the treasure of this one historic chieftain."[5]

Mr. Matson, on page 129 of the *Ohio Centennial Report*, "describes four skeletons, on each of which shell beads were found. In three cases they had been placed about the neck only; in the fourth, nearly thirty yards of beads had been used. There were four strands about the neck, crossing over on the breast and back and passing down between the legs. Strings passed down the legs to the feet, and were also found along the arms and around the wrists."[6] It is not evident whether these beads were worn, arranged in the way described, during life; they may only have been placed so before burial. It was a common custom to bury all valuable possessions with their dead owner, and Le Jeune mentions the practice of even putting bracelets of beads on the bones of the dead before the communal burial in ossuaries.[7]

On the neck of a skeleton in the Princess mound, Rice Lake, Mr. Boyle found 865 discoidal beads, which appeared to have been in several strings. In the same mound there were also 300 beads made of *Marginella conoidalis*, arranged in two strings.

The wearing of bead necklaces, as was observed by one of the Jesuit Fathers, was "more common among men than among women."[8]

The simplest ornaments consisted of entire shells, not altered in any way, except that they were pierced for stringing. For this purpose both land and fresh-water species were freely utilized; beads fashioned of whole shells being perhaps the most common objects of the kind found in Ontario.

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[1] Kip: *Jesuit Missions*, p. 25; *apud* Holmes, p. 231.

[2] Vol. 27, p. 247.

[3] *Fossil Men*, p. 140.

[4] Drake: *Book of the Indians*, p. 27.

[5] "Art in Shell," p. 234.

[6] *Ibid.*, p. 231.

[7] Le Jeune's *Relation*, Vol. 10, p. 293.

[8] *Journal of the Jesuit Fathers* in 1658, Vol. 44, p. 291.

Perforated shells of *Melantho decisa*,[1] (figure *e*, plate VIII.), one of the largest and heaviest of our fluviatile univalves, abound. These shell-beads are known to occur on village sites in the Counties of Waterloo, Oxford, Brant, York, Victoria and Simcoe; and they are also met with in the kitchen-middens of Central and Western New York. They may have been worn as among the Virginia Indians, described by Strachey, who says they wore "sometymes divers kinds of shells, hanging loose by small purfleets or threeds, that, being shaken as they move, they might make a certaine murmuring or whisteling noise by gathering wynd, in which they seeme to take great jollity, and hold yt a kind of bravery."[2]

Another species frequently found is *Pleurocera subulare* (figure *f*, plate VIII.), a native of the Great Lakes. This is likewise pierced through the lip. Waterworn specimens of this shell, perforated in precisely the same way, but quite adventitiously and by wholly natural means, were collected by the writer on the shore of Lake Erie; and we have seen some from Indian camps which have every appearance of having been such shells appropriated by the Indians merely because they were already provided with a suspension hole. Such accidentally perforated ones, one would think, suggested the idea of piercing those that were *not* perforated, just as Holmes says, "Perforations which occur naturally in some species of shell would be produced artificially."[3] The New York Indians used these shells for a similar purpose; several specimens in the museum of the Buffalo Academy of Sciences being obtained from kitchen-middens in the western part of the State. The Provincial Museum contains examples from the following localities: Waterloo, Oxford, Brant, and Victoria counties. Many of these specimens (especially those from Oxford and Waterloo) come from prehistoric sites.

Goniobasis livescens (the *Melania livescens* of the older conchologists) is another fresh-water shell, resembling the species just described, although it is not quite so large. It is also frequently perforated for use as a shell-bead, or, perhaps, as an ear ornament; for the Canadian Indians, according to the *Jesuit Relations*,[4] used shells for this purpose. This species is not so commonly met with as the *Melantho* and *Pleurocera*. Ash beds and débris heaps in the following counties in Ontario have yielded specimens: Brant, Oxford, York and Waterloo. Dr. Beauchamp has collected this species and *G. depygis* in Central New York.

Shells of *Planorbis trivolvis* have been found, "rubbed smooth and polished by long use as ornaments," in refuse heaps in York County. *P. bicarinatus*, a smaller species with, as its specific name implies, two sharp ridges revolving on the whorls of the shell, "in the same condition as is the last," were likewise collected. In addition to these are mentioned several land snails, such as *Polygyra palliata*, "polished by long use as an ornament;" *Stenotrema monodon* (a species about half the size of *palliata*) "from Old Fort, Whitchurch, in which a hole has been made

[1] The writer has a specimen with two holes—one in the usual place and the other higher up in the spire; but the remarkable feature about this example is that there are apparent evidences of reparative growth subsequent to the piercing of the lower hole, showing that the animal lived for some time after the operation; for it is well known that most mollusks have the power of repairing their shells when they are injured. No explanation can be offered as to the probable reason for this double perforation, except, possibly, to kill the animal, or to facilitate its removal from the shell.

[2] *The Historie of Travaile into Virginia Britannia*, etc., p. 67.

[3] "Art in Shell," p. 188.

[4] Vol. 1, p. 281.

through the centre of the spire."[1] The writer himself has occasionally picked up the prettily mottled shells of *Pyramidula alternata*, while searching for relics, and on one occasion found several with a hole passing through from the apex to the umbilicus. This hole may also have been made by accident recently, for the shells are very fragile.

In Mr. Laidlaw's collection there are three pierced shells of *Limnæa catascopium* from Victoria county, one of which we illustrate (figure *g*, plate VIII.) The walls of this particular specimen are much heavier than those of recent shells of this species, especially those found inland. Several shells of *L. palustris*, worn and polished, with holes within the lip, were collected in York county.

On a village site in Waterloo county the writer picked up a broken valve of the small species of bivalve known as *Sphærium striatinum*, which had been pierced with a hole. This specimen, unfortunately, was lost. It is the first record of this species being used for ornamental purposes.

Dawson, in his *Fossil Men*, mentions a necklace "composed in part of shells of *Purpura lapillus* from the distant coast of New England, and in part of rude beads of native copper from Lake Superior," which were found in a grave at Brockville, Ontario. The Indians of Newfoundland also strung these shells for beads and ornaments.

There is a little shell quite commonly used as a bead, and this is *Marginella conoidalis* (figure *h*, plate VIII.) It is a marine species, and has the apex ground down until a hole appeared. This shell has been discovered in different localities in Ontario, and is frequently met with in some parts of the United States.

A perforated shell of *Natica duplicata*, in the Museum, was discovered in a gravel pit near the town of Simcoe, in Norfolk county. When found it and a bone needle were still united by a strand of hair. This species is oceanic.

There is also a string of *Olivella oryza* shells, from York county, in the Provincial collection.

Beads made from pieces of the larger tropical shells are more numerous than those just described. The flat discoidal forms are derived from the solid columellæ (see figures *f*, plate XIII.), and there are also some from the parietal portions. There are in the Museum several almost spherical specimens from Onondaga township, Brant county. Others are cylindrical and from one to two and three or more inches in length, and varying from about $\frac{3}{16}$ to $\frac{3}{4}$ of an inch in diameter. One bead of this kind, from Brant county, is made of the columella of a large conch and is over $6\frac{1}{8}$ inches long. This is evidently the kind of bead referred to by Adair, when he says: "Formerly four deer-skins was the price of a large conch-shell bead, about the length and thickness of a man's fore-finger; which they fixed to the crown of their head as an high ornament—so greatly they valued them."[2]

Figure *a*, plate IX., shows the only known example of a discoidal bead made of *Unio* shell obtained from a prehistoric site in Ontario. It seems to be derived from *U. luteolus*, the thickest *Unio* found in the part of the country where this specimen was found, namely, in North Dumfries township, Waterloo county. This specimen is a little more than $\frac{3}{4}$ of an inch in diameter and $\frac{3}{16}$ thick. It retains the pearly nacre of the fresh shell. If the prehistoric Neutrals knew anything about wampum this one no doubt would be regarded as such.

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[1] *Ontario Archæological Report* for 1901, pp. 46-47.

[2] *The History of the American Indians*, p. 170.

The small shell-bead shaped like a truncated pyramid represented in figure *b*, plate IX., comes from York township. It is made of a piece of one of the large conchs. Its proportions are $\frac{7}{16}$ by $\frac{5}{16}$ of an inch, and is about $\frac{7}{16}$ of an inch high. The hole at the bottom is round, while at the top it is oval or almost quadrangular.

In figure *c*, plate IX., we have one of the most remarkable shell-beads in the Provincial collection. It was found on lot 19, concession 3, London township, Middlesex county. It is only about $\frac{1}{2}$ inch long and nearly as wide.

We have another unique form of bead represented in figure *f*, plate IX. The end view shows the curious shape of this specimen. Its length is $\frac{3}{4}$ of an inch. The hole was drilled from both ends, the perforations meeting near the middle. It comes from Nottawasaga township, Simcoe county.

A curious bead, made from the rostrum or beak of a conch shell, is shown in figure *d*, plate IX. The hole was bored through the rounded columella, and the natural canal and a portion of the lip was retained. It is a little more than $1\frac{1}{8}$ inches long, and 1 inch wide. This is the only specimen of the kind that we have ever seen. It comes from Onondaga township, Brant county.

Figure *e*, plate IX., shows a rude bead made from an unsymmetrical piece of shell, which comes from Nottawasaga township. It appears to have been a fragment of another piece which likewise was provided with a hole, a portion of which is retained. It was afterwards re-bored. The lamellar structure is shown on one side. It is $\frac{3}{4}$ of an inch long, and about $\frac{3}{8}$ square.

The cylindrical bead from Beverly township, Wentworth county, shown in figure *g*, plate IX., is another peculiar specimen. The holes are bored somewhat like those in bird amulets. First a hole was drilled in at the end to the depth of about $\frac{7}{32}$ of an inch, and a lateral hole was bored to meet this. Both holes are now broken. At the end where the hole is most badly broken an attempt was made to pierce it from the opposite side. It is about $1\frac{5}{8}$ inches long, and $\frac{1}{4}$ of an inch in diameter.

A similar bead, except that the holes go entirely through, and which also comes from Beverly township, is shown in figure *h*, on the same plate. It is made from the internal column of a tropical shell, the spiral groove of which is still retained. The holes are a little more than $\frac{1}{8}$ of an inch in diameter, and were drilled from both sides, the perforations meeting in the middle. It is $2\frac{1}{4}$ inches long, and nearly $\frac{1}{2}$ of an inch thick.

Our collection also includes numerous examples of what are called runtees, which are thus described by Beverly: "These are either like an Oval Bead, and drill'd the length of the Oval, or else they are circular and flat, almost an inch over, and one-third of an inch thick, and drill'd edgeways."[1] He gives an illustration of an Indian boy who is described as wearing a necklace of runtees. Figure *c*, plate XVIII., is Holmes' copy (figure 5, plate XXXVI.) of a portion of Beverly's engraving.

Figure *i*, plate IX., shows a common form of runtee bead from a mound near Port Colborne. It is $1\frac{1}{4}$ inch long, $\frac{7}{8}$ wide and $\frac{3}{16}$ thick.

A rude, heavy bead, triangular in cross-section, which comes from lot 34, concession 7, Beverly township, is shown in figure *j*, on plate IX. It is $\frac{13}{16}$ of an inch long and $\frac{3}{4}$ wide. There are several of a similar shape in the Museum; also some flattened, rectangular pieces of approximately the same size.

[1] *History of Virginia*, Book III., p. 59.

The bead shown in figure *k*, plate IX., comes from a prehistoric site in Waterloo county, and is the only bead of this type ever found on a village site in that part of the Province, although it is only a short distance from sites (in Brant county) yielding numerous objects made from tropical shells. The hole was bored from end to end and is of uniform diameter throughout. The proportions of this bead are :—length, $\frac{11}{16}$ of an inch ; width, $\frac{5}{8}$; thickness, $\frac{3}{16}$ of an inch. It is still quite smooth and polished, and in appearance is almost like porcelain. One side is slightly concave and the other is convex.

A unique form of runtee bead is illustrated in figure *l*, plate IX., which was obtained from a mound at Port Colborne. The hole is not bored through from end to end, but was made in the same way as the holes in bird amulets, the lateral hole being bored to meet the one drilled lengthwise from the middle of the end. Mr Boyle says of this specimen : "Shell-beads bored in this way are by no means common, if we may judge from the fact that the specimen figured here is the only one that has come into our possession since the Ontario archæological collection was begun, twenty-one years ago."[1] This specimen is much decayed, exposing the lamellar structure of the shell. The darker portions shown in the figure are a dull red in the specimen. It is roughly circular or orbicular in outline, and is $1\frac{3}{8}$ inches in diameter and nearly $\frac{3}{8}$ thick.

In figure *m*, plate IX., we have a somewhat different style of runtee, also made of sea-shell. A portion of this specimen is missing, but it evidently was provided with two perforations, a portion of one of which still remains, as is indicated in the figure. The only attempt at decoration is a row of circular depressions along the edge and across the middle. This specimen must have been worn a considerable length of time as some of these depressions are almost, in fact some of them are, entirely effaced. Professor Holmes figures (fig. 3, plate XXXVI.) a specimen somewhat similarly decorated, which comes from New Mexico and is now in the U.S. National Museum. As in Holmes' figure, our specimen may also have had a line crossing the other, forming a cross. The width of this specimen is a little more than $\frac{7}{8}$ of an inch, so this must have been its general diameter when whole. It is $\frac{3}{16}$ of an inch thick. This specimen comes from Nottawasaga township, Simcoe county.

The specimen shown in figure *e*, plate X., which may also have been a gorget, is a flat piece of tropical shell, over 2 inches in diameter. It is thus described by Mr. Boyle in the *Archæological Report* for 1897 : "The three concentric circles in the middle and the arcs on the margin have been described from central points by means of something answering the purpose of compasses, as have also the smaller circles surrounding the dots. The pattern has been carefully laid out, and quite as accurately worked out. Although not more than $\frac{1}{8}$ of an inch in thickness on the edge, and about $\frac{3}{16}$ in the middle, two holes having a diameter of two millimeters are bored from edge to edge, as shown by the dotted lines, which are not on the specimen itself. The extremities of the holes bear evidence of much wear." This fine specimen comes from near Penetanguishene, Simcoe county. Some years ago a somewhat similar one was found in a grave near the Humber river, in York county.

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[1] *Annual Archæological Report* for 1906, p. 32.

Pendants.

Some of these were no doubt attached as auxiliary ornaments to the larger gorgets of shell.

Figures *a* and *b* on plate X., represent two "ear drops" or pendants of *Unio* shell, from Nottawasaga township, Simcoe county. They still retain the pearly coloring of the natural shell, and in figure *a*, the pallial impression remains. The holes in both specimens are only about $\frac{1}{32}$ of an inch in diameter. The larger specimen is 1⅛ inches long and $\frac{15}{16}$ wide; while the other is $\frac{15}{16}$ of an inch long and ¾ of an inch wide, and they are not more than ⅛ of an inch thick.

A small pear-shaped pendant or "ear-drop" made of conch shell, obtained from a grave on lot 10, concession 3, Onondaga township, is shown in figure *c*, plate X. Its proportions are: length, ⅞ of an inch; width, ⅝, and it is a little more than ⅛ of an inch thick.

Figures *g* and *h*, plate X., are from Brant county, and are both made of *Unio* shell. Figure *h* is a little more than ⅞ of an inch long, ½ inch wide, and $\frac{1}{16}$ thick. The other is a little smaller and has a square perforation. It measures $\frac{9}{16}$ of an inch in length and is $\frac{7}{16}$ wide.

The concavo-convex, irregularly shaped pendant represented in figure *d*, plate X., comes from Onondaga township. It is in poor condition owing to decay. The proportions of this specimen are: length, 1⅝ inches; width, ⅝ of an inch.

A pendant ornament with two holes is shown in figure *k*, plate X. It seems to have been made from a small conch. The upper portion is triangular in cross-section. The length of this specimen is 1¼ inches and its width is about ¾ of an inch. This object is also considerably decayed. It comes from Onondaga township.

Figure *f*, plate X., represents another form of pendant from a grave in Onondaga township. The greater part being like soft chalk, considerable portions have broken away. It is 1¾ inches long, and ½ of an inch wide.

Figures *i* and *j*, plate X., are made from the parietal portions of a small conch. Figure *j*, has a deep groove cut across the side shown; and this, no doubt, was done to separate the perforated part from the lower portion. Below this groove there is another incised line. Both specimens come from Beverly township and their respective proportions are: figure *j* —1 by $1\frac{7}{16}$ inches; figure *i*—1⅛ by 1¼ inches.

In figure *a*, plate XI., is shown a roughly made pendant consisting of a narrow strip of conch shell, with a hole through one end. The other end has been left in the rough state. This specimen is 2⅜ inches long, $\frac{9}{16}$ wide, and ¼ thick. It comes from Beverly township.

We have another crude pendant made of a rough, angular fragment of a massive species of *Unio* (perhaps *U. plicatus*) represented in figure *b*, plate XI. The whole specimen has not been smoothed and polished in any way. The hole is a little larger than ⅛ of an inch and was drilled straight through, and not from both sides as is so usually done. The natural nacreous surface of the original shell still remains. It is 2¼ inches long, $1\frac{3}{16}$ wide and $\frac{5}{16}$ thick. This object was found on lot 19, concession 3, London township.

In figure *c*, plate XI., we have what is, in all probability, one of the most unique forms of pendants yet discovered; at least we have never seen anything similar illustrated. It was made of a small tropical shell, probably a *Strombus*, the apex of which was ground flat, and the solid columella reduced to the upright cylindrical projection seen in the figure. The marks

of the whorls are still to be seen on the lower surface. The flanged portion, or base, is ⅞ of an inch wide and is less than $\frac{1}{16}$ of an inch thick at the edge; the entire height is $\frac{11}{16}$ of an inch. An oblong lateral hole has been made through the side to meet the vertical one which is about $\frac{3}{32}$ of an inch in diameter. This very interesting specimen comes from Beverly township.

The ornament shown in figure *d*, plate XI., seems to be a fragment of one of the sandal-shaped gorgets, but it may also have been given its present form originally. Its length is 2 inches, and its width 1⅞. It was found near London, Ont.

Figure *f*, plate XI., represents a large pendant made of a piece of tropical shell. It seems to have been much longer. The fractured edge has been smoothed a little. There are three incised lines across each corner. The proportions of this ornament are: Length, 2⅜ inches; width, 2⅝ inches. It comes from Brantford township, Brant county.

The pendant of tropical shell shown in figure *e*, plate XI., has an eye drilled through a raised projection. The other "side is perfectly smooth but for a few slight, half aimless looking scratches that were meant for a design."[1] The ends are polished but the condition of the edge at the sides show that portions had been broken off each side. Both of these edges are not polished or even smoothed.

Entire shells of small oceanic species were also used as pendants. Figure *d*, plate XII., shows a small *Strombus*, of what species it would be difficult to say with accuracy. Part of the rostrum or beak has been broken off. A hole $\frac{3}{16}$ of an inch in diameter has been pierced through the lip. The length of this shell is 2 inches. It was found in Nottawasaga township, Simcoe county.

Figure *b*, plate XII., represents a small specimen of *Fulgur* or *Busycon perversum* from the Atlantic, which has been worn as a pendant. It has a perforation through the lip, and shallow grooves have been cut on each side of the rostrum, from which end it was, no doubt, suspended; the hole in the lip perhaps serving for the attachment of other ornaments, such as strings of beads, etc. Through long burial it is now quite chalky in appearance. Its length is 2¼ inches. It comes from Tiny township (lot 11, concession 10), Simcoe county.

In figure *a*, on the same plate, we have a shell of the same species. In this specimen the suspension was effected by a small hole through the rostrum. Another hole was drilled through the upper part of the lip. This shell still retains some of the natural coloring on the surface, the radiating bars of reddish brown being particularly fresh. The length of this specimen is 1⅞ inches. It was found in Nottawasaga township, Simcoe county.

Another almost entire shell, perforated for suspension, is shown in figure *c*, plate XII. This is made of another species of shell, *Fulgur pyrum* (?), and differs from figures *a* and *b*, in being dextral whorled. As may be seen from the illustration it is not so perfect as the other examples, portions of the spire having been broken in, exposing the columella. Its length is 1⅞ inches. It was found in Onondaga township, Brant county.

Dr. Wilson describes a shell pendant from Nottawasaga which, he says, "has the upper whorls removed, so as to expose the internal canal. Five lines, or notches, are cut on the inner face of the canal, and it is perforated on the opposite edge, showing in all probability where the wampum,

[1] *Archæological Report*, 1904, p. 45.

scalp-lock, or other special decoration of its owner was attached. It also exhibits abundant traces of its long and frequent use . . . and all the natural prominences are worn nearly flat by frequent attrition."[1]

Gorgets.

These are thin, mostly nearly circular, concavo-convex plates derived from the most dilated portion of large tropical shells. (See figure *g*, plate XIII., copied from Holmes' plate.)

We find that the early explorers of the Atlantic Coast make frequent mention of gorgets and other ornaments; and as these allusions are always interesting, we will quote a few of them here. Perhaps one of the earliest we have is that of Beverly, who was an accurate observer of the habits and customs of the Indians he encountered. He gives a picture of a Virginia Indian in summer dress, of whom he says: "At his Ear is hung a fine Shell with Pearl Drops. At his Breast is a Tablet or fine Shell, smooth as polish'd Marble, which sometimes also has etched on it a Star, Half Moon, or other Figure, according to the maker's fancy."[2] On another page he writes, "Of this Shell they also make round Tablets of about four inches diameter. . . . These they wear instead of Medals before or Behind their Neck."[3] Brickell[4] says of the Indians of North Carolina: "They frequently make of these *Shells*, several sorts of Figures, in imitation of *Gorges*, *Crosses*, *Stars*, or any other odd kind of Figure that their imagination suggests, these they wear about their Necks and Arms tied with a String; there are some of these *Gorges*, that will sell for three or four *Buck Skins* ready drest, whilst others are only valued and sold for one *Doe Skin*."[5] Adair gives the following account: "The American *Archi-magus*, wears a breast-plate, made of a white conch-shell, with two holes bored in the middle of it, through which he puts the ends of an otter-skin strap, and fastens a buck-horn white button to the outside of each."[6] "The northern savages," says Lafitau, "wear on the breast a plate of hollow shell, as long as the hand, which has the same effect as that which was called *Bulla* among the Romans."[7] And Kalm, describing the ornaments of some Indians he saw at Lorette, in Quebec, writes: "Round their neck, they have a string of violet wampums, with little white wampums between them. These wampums are small, of the figure of oblong pearls, and made of the shells which the *English* call clams. . . . At the end of the wampum strings many of the *Indians* wear a large French silver coin, with the King's effigy, on their breasts. Others have a large shell on the breast, of a fine white colour, which they value very high and is very dear."[8]

Judging from the large numbers of these found almost over the entire eastern seaboard of North America, from Florida to our own Province, gorgets were a very popular kind of ornament. The stone graves and caves of Tennessee have produced most of these objects, many of them

[1] *Canadian Journal*, (1854-55), Vol. III., p. 158.

[2] *History and Present State of Virginia*, Book III., p. 4. (See figure *d*, plate XIII.)

[3] *Ibid.*, p. 59.

[4] *Natural History of North Carolina*, p. 337.

[5] Lawson, whose account is substantially the same as Brickell's, says; "There be others, that eight of them go readily for a doe skin."—*History of Carolina*, etc., (Raleigh reprint, 1860), p. 315; *apud* Jones.

[6] *History of the American Indians*, p. 84.

[7] *Mœurs des Sauvages Ameriquains*, Vol. 2, p. 61; *apud* Holmes. (See figures *a* and *b*, plate XVIII.)

[8] *Travels into North America*, Vol. III., p. 180.

being engraved with symbolic devices. They are common here in Ontario, but are invariably found associated with articles of European origin, thus showing that their manufacture, or, what is more likely perhaps, their introduction from the south, was comparatively recent. A few, however, may perhaps be prehistoric.

Having lost every vestige of their natural color, these objects are now far from being "things of beauty;" in fact, to see them in their present condition, and not knowing of what material they were made, some would be inclined to ask "What beauty did the Indian see in these things?" However, one need only look at a Giant Conch or *Busycon*, from which most of these ornaments are derived, to see how beautiful they really were. Mr. Boyle thinks that the beauty of these objects was, perhaps, further enhanced by the application of various colors. A bone bead in the Museum (described in the *Annual Report* for 1900) was decorated in this way, and he argues from this that this species of decoration might have been used on other ornaments as well; especially those that lacked colors of any kind. This sounds reasonable enough, although there is no proof that this was so; the specimens themselves offer no evidence of such treatment.

We have mentioned that in Tennessee more shell ornaments have been found than anywhere else; in fact, Mr. Holmes calls it, a "great storehouse" of shell relics. Here have been discovered shell breastplates on which are engraved highly conventionalized representations of the rattlesnake—a species of snake both feared and venerated by many tribes of the American Indians. We present an illustration of one of these gorgets in figure *e*, plate XII. The reader will not fail to see the close resemblance it bears to figure *f*, on the same plate, representing a gorget found in a large bed of ashes, fully two feet below the surface, in Brantford township, Brant county. Mr. Boyle gives a very good description of this gorget in the *Archæological Report* for 1899, which is as follows: "The straight edge . . . . still shows marks of the sawing that was required to separate this from the other portion, but it is, of course, impossible to say whether the cutting was performed after an accidental break had spoiled the whole gorget, or whether an entire object had been cut in two for any reason. In addition to the original suspension holes, other two have been bored near the straight edge, no doubt that the gorget might hang more evenly, in keeping with its change of shape, yet without any regard to the position of the figure which would now be upside down. It is observable too, that the more recently formed holes bear even deeper signs of wear than the original ones do. Still further comparing this specimen with perfect gorgets, it will be seen that only the tail and the adjoining section remain while most of two other sections on a convex part of the shell are nearly worn out by contact with the human body—presumably. Of the second section from the tail, a little cross-hatching remains, and to the right are the three dots in line belonging to a bar that has disappeared; while further on still, is a single dot which was, no doubt, within two circular lines like those that remain, and near the dot are portions of the parallel lines separating the design from the border. The chevron, or diagonally opposed lines to indicate the tail are not so well made as those on most of the specimens figured in archæological books, but they show clearly enough the intention of the design.

"The fact that, so far as known, this is the only specimen of its kind found in Ontario is of itself almost sufficient to warrant the belief that it

is accidental, intrusive, imported ; and we may go so far as to say that the secondary wearing of the gorget upside down would tend to show that the owner of this portion either did not know, or did not care how it was suspended, in which case it is plain that the symbolic nature of the work possessed no interest for him, and that he wore the gorget simply as a gawgaw, or because the lines may have suggested some 'big medicine' on account of their being quite unlike anything he had ever seen before." (p. 25).

The proportions of this very interesting specimen are : length, 4¾ inches ; width, 2¼ inches.

Besides this we have only one other engraved shell gorget in the Museum, and this comes from a mound in Otonabee township, Peterboro' County. It is shown in figure *a*, plate XIV. We shall also quote Mr. Boyle's description of this specimen. He says "It is a part of a *busycon* or some other large shell, and measures nearly eight inches in length by four in breadth. In a rough way it seems to represent a turtle, the hinder portion of which is broken off. The incised lines are sharply cut, but the execution is so rough as to show us that no drawing had been made to guide the hand or the graver. Perhaps the most instructive lesson deducible from this specimen is to be found in the central part of the design, where we find that the workman has *not* employed any kind of dividers to mark what he intended to be circles. The work has been hurriedly performed—perhaps on purpose to place as an offering with the body buried in this mound, for not only are the lines unsymmetrical in their arrangement, but on the right side it will be noticed that one of the rows of shallow holes has been left incomplete. Several tons of earth were carefully sifted in vain, to find what appeared to be the missing hinder part of the specimen. The conclusion, however, was at last reached that the portion figured was all that had been buried ; probably all that ever had been made ; that it had been made simply to deposit in the mound, and this supposition receives support from the fact that the suspension holes on the right-hand edge of the body show no signs of the slightest wear."[1]

The long sandal-shaped gorget represented in figure *d*, plate XIV., comes from near London, in Middlesex county. It is 8 inches long and 3 wide. This is the only one of the kind in the Museum. A similar specimen from Ohio, in the U. S. National Museum, is nearly nine inches long. A Mr. Whitney, who discovered one of these objects, in his letter transmitting it to the National Museum, says that "about ten pairs of the shell sandals of different sizes, and made to fit the right and left feet"[2] were found. While the outline of these gorgets approximates that of the sole of the foot, there is nothing in their appearance otherwise which would indicate such a use ; and, besides, they would be almost too fragile for this purpose anyway. Some fifteen or twenty gorgets of a similar shape were once taken from a grave in Indiana.[3] A comparison with Holmes' figure[4] and the one in Moorehead's *Prehistoric Implements*, will show how remarkably similar these specimens are in every way. In each example there are three holes and all placed in nearly the same position. Our specimen is concavo-convex.

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[1] *Archæological Report* for 1896-97, p. 56.

[2] "Art in Shell," p. 265.

[3] *Prehistoric Implements*, p. 344, figure 503.

[4] Plate L, figure 5.

Figure *b*, plate XV., represents a large gorget derived from the dilated parietal portion of a *Busycon* or *Strombus*. It is in very good condition; though, like all the rest of these shell objects, has been reduced to a substance like chalk. This specimen is nearly 5 inches long, and a little over 3¾ inches wide. It was found in North Cayuga township, Haldimand county.

There are several other specimens resembling this one in the Provincial collection. One of them, from near London, is 5½ inches long and 4 inches wide. It has three perforations in a row, one of them being a little further away from the others which are close together. This and the outer one of the two show signs of wear from the suspension cord. The middle hole is not worn at all, and it evidently was made by mistake, the wearer afterwards discovering that the ornament would not hang straight. It is derived from the lip of a *Busycon* and is much weathered.

The largest shell gorget we have also is made from the lip of a *Busycon*. It is 7 inches long and 5 wide, and comes from the Teeple farm, Beverly township.

In figure *a*, plate XV., is represented the concave side of a gorget pierced with three holes. It was found in a grave in Onondaga township, Brant county. The edges are very much corroded. Its proportions are: length, 4⅛ inches; width 3⅜ inches.

The specimen shown in figure *g*, plate XI., comes from lot 10, concession 3, Onondaga township, Brant county, and is the smallest shell gorget in the Museum. It is 1⅞ inches wide.

A gorget from Norfolk county is shown in figure *b*, plate XIV. The markings on the surface are the natural lines of growth, the object being derived from the lip of a *Busycon*. It is 3¼ inches in diameter.

These two-holed gorgets may have been strung in the manner shown in figure *d*, plate XVIII., which we copy from one of Beverly's engravings.

In figure *c*, plate XIV., is represented a gorget with three holes, the one in the centre being much larger than the two others. This one is nearly four inches in diameter. It comes from Norfolk county. We have six specimens of this type, of which two are fragmentary. One of them is tinged a beautiful pale green color, possibly from contact with copper. It was found near London, and is 3½ inches in diameter. Another one is only 2⅜ inches wide. A large portion of it is missing. Similar specimens have been found in Ohio.

Figure *b*, plate XVI., represents the hollow side of a large oval gorget, apparently made from the body-whorl of the *Busycon*. It comes from the Sealey farm in Brant county. Almost the whole of the surface of the convex side is coated with what looks like iron rust. The diameters of this specimen are 5⅛ and 5⅜ inches. It is pierced with five holes.

In figure *a*, on the same plate, we have another shell gorget from the same place. It has eight holes through the middle portion, and there are also two holes on the margin. This specimen is 3⅞ inches long.

Figure *a*, plate XVII., represents the concave side of a large gorget from an Indian mound near Port Colborne. It has seven perforations, the two larger being no doubt intended for the suspending cord. The deeply shaded portions show where the gorget came into contact with iron, two articles made of this metal, (a knife and pair of scissors) having been found in the same mound. It measures 4⅜ inches across its longer diameter.

These specimens with supernumerary holes may have been worn in the manner shown by figures *a* and *b*, plate XVIII. (which Mr. Holmes copies

from Lafitau), the extra holes serving for the attachment of auxiliary ornaments, such as pendants, beads, etc.

Professor Holmes figures and describes a gorget with four holes, which comes from Beverly township. The holes are arranged in the form of a rectangle. The gorget itself is described by Mr. Holmes as "keystone" shaped. (See figure 1 on Holmes' plate L., "Art in Shell").

Pins.

This is a class of objects frequently found in the mounds and stone-graves of the middle and south-eastern United States. Professor Holmes says of them: "The exact uses to which these pins were applied by the mound-building tribes are unknown; various uses have been suggested by archæologists. The favorite idea seems to be that they were hair-pins, used by the savages to dress and ornament the hair. It would seem that many of them are too clumsy for such use, although when new they must have been very pretty objects . . . . Similar objects of bone or ivory, often tastefully carved, are used by the natives of Alaska for scratching the head, although it seems improbable that this should have been their most important function."

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"It is possible that they may have served some purpose in the arts or games of the ancient peoples; yet when we come to consider the very great importance given to ornaments by all barbarians, we return naturally to the view that they were probably designed for personal decoration."[1]

There are several forms, some being headless, while others have large, globular heads, and others, again, have broad, flattened heads. Figure *g*, plate XII., shows one of the latter type, from Nottawasaga township, Simcoe county. This is the only example in the Provincial Museum. It is 3¾ inches long and the head measures ¾ by 1½ inches. The shaft is perforated near one end. Our engraving, unfortunately, does not bring out the beautiful marbling of the foliation. The head or flanged portion of this specimen appears to be derived from the peripheral ridge of the shell, the long shaft being cut from the body below or the shoulder above. Professor Wyman described and figured a somewhat similar specimen (except that his was shorter and much thicker in the shaft), from a burial mound at Black Hammock, Florida, in the *American Naturalist*.[2] He says that it was "cut from that portion of a *Pyrula*, namely, the suture, where one whorl joins the preceding." As it is perforated near the point he regards it as a pendant ornament. It is altogether likely that our specimen was also a pendant. General Thurston, in his *Antiquities of Tennessee*,[3] illustrates a shell object resembling ours, except that it is not perforated. He calls it a "brackett," and says it "was ingeniously carved from the heavy point and the perpendicular column" of the shell. "The ingenuity of the mechanic, and the taste that suggested this useful little object," he says, "seem to indicate a somewhat advanced condition of society." It would seem from this that Mr. Thurston believes his specimen to have had a useful rather than an ornamental function. But, while the precise use of these objects is open to conjecture, we may safely assume that they were intended for personal ornaments.

[1] "Art in Shell," p. 217.
[2] Vol. 2, 1869, p. 455. Plate X.
[3] Cincinnati, 1890, p. 315, fig. 223.

Other Ornaments.

In figure *b*, plate XIX., we have a very interesting specimen, the general outline of which approximates that of a fish, the mouth even being indicated. The tail portion is lacking. It is made of *Unio* shell of which the pearly nacre still remains. In its present condition it is difficult to determine what species of *Unio* furnished the material for this unique ornament. One of the spots for the attachment of the adductor muscles remains, as well as the pallial line. It is pierced with five holes, one of which serves to indicate the eye of the fish, and the others were no doubt intended for suspension and the attachment of subsidiary ornaments. A portion of the convex surface is considerably polished, showing that the ornament was worn with the hollow side outward. Its proportions are:—length, $2\frac{3}{8}$; width, $1\frac{1}{8}$ inches. It comes from Beverly township, Wentworth county.

Figure *e*, plate XIX., shows a decorticated valve of *Unio ventricosus* from a prehistoric village site in Wilmot township, Waterloo county. It was pierced with three holes.

A peculiar ornament, also made of *Unio* shell, is shown in figure *d*, plate XIX. Its contour suggests no particular resemblance to any animal form. The notches may have served for the attachment of the suspension cord. A portion of the smaller end is broken off. Its proportions are:—length, $1\frac{5}{16}$ inches; width, $\frac{13}{16}$ of an inch. It was found on the Sealey Farm, Brantford township.

We are tempted to regard the specimen shown in figure *g*, plate XIX., as a sort of lizard effigy. The lateral projections plainly represent limbs, and the head and tail are also quite evident. It is made of conch shell, is highly polished, and resembles ivory. Its length is $2\frac{5}{16}$ inches, and it is $\frac{5}{8}$ of an inch wide. It comes from Beverly township.

The paddle-shaped specimen represented in figure *j*, plate XIX., at present forms part of a string of shell and European glass beads which were found near Lambton Mills, York county. It may have been used for fastening strings of wampum to the clothing by passing it though a hole in the garment, just in the same way as the guard of a watch chain is passed through the button-hole. On one side there are several transverse markings. It is made of conch shell and is $1\frac{1}{4}$ inches long.

Figure *h*, plate XIX., shows an unfinished specimen. It is $1\frac{9}{16}$ inches long and $\frac{9}{16}$ wide.

Another shell ornament is shown in figure *a*, on plate XIX. It is nearly 1 inch long, $\frac{5}{16}$ wide, and a little more than $\frac{1}{16}$ thick. On one side there is an incised longitudinal line with four short lines crossing it at right angles.

In figure *c*, plate XIX., is shown a fragment of conch shell on which is incised a fairly-well executed human face. The lines descending from the mouth may indicate tattoo marks, or perhaps a beard—thus to typify a European. It is 1 inch long, and was found in Brant county.

In the specimen represented in figure *f*, plate XIX., we have an example showing the native appreciation of the beautiful iridescent nacre of shells. This specimen, the Hon. F. R. Latchford, K.C., says, "is a disc formed by breaking a large *Unio* shell (right valve) away from a centre formed by the posterior adductor muscle impression or attachment. The nacreous plates are so highly iridescent that the possessor of this ornament must have attracted great attention. The species from which the disc was cut is conjectural. The test is fresh and shows the greenish

tint common to *Unio ventricosus* or *U. subovatus*. It might also be made from *U. ligamentinus*, which is common in the Thames drainage." It is $1\frac{1}{8}$ inches in diameter and comes from Delaware township, Middlesex county.

There is in the Museum another disc from Eagle Place near Brantford. Mr. Latchford thinks it is derived from a sea-shell. The disc is almost perfectly circular, a little over 1 inch in diameter, and nearly $\frac{1}{4}$ inch thick. The nacreous portion is iridescent and almost like some species of *Haliotis* or Abalone shell.

Figure *i*, plate XIX., may perhaps be a portion of a gorget. It is made of conch shell. At the upper right-hand corner there is a rectangular raised portion, which appears to have been produced artificially. The incised markings may have had some special significance to the maker. This fragment measures $1\frac{3}{4}$ by 2 inches and is $\frac{1}{4}$ of an inch thick. It comes from near Brantford, in Brant county.

From the use of shells as ornaments to that of their use as currency is but a step.

IV. Wampum.

It consisted of small cylindrical (see figure *n*, plate IX.) and also disc-shaped beads made from different kinds of shells.

Several early writers describe the method of manufacturing. "The process of manufacturing it," says Burnaby, "is very simple. It is first clipped to a proper size, which is that of a small oblong parallelopiped, then drilled, and afterward ground to a round smooth surface, and polished."[1] Brickell says: "This Shell they grind smaller than the small End of a *Tobacco Pipe*, or a large *Wheat Straw*, four or five of them are about an inch in length, and every one drilled through, polished and made as smooth as Glass, yet they are as strong as *Beads*."[2] And on the following page he states that "They grind these Shells upon Stones and other things, 'till they make them current."[3] We learn from Van Der Donck that "They strike off the thin parts of these shells and preserve the pillars or standards, which they grind smooth and even and reduce the same according to their thickness, and drill a hole through every piece, and string the same on strings, and afterwards sell their strings of wampum in that manner."[4]

The great labor in preparing it, however, was the boring; which, according to one writer, was effected with a sharp flint.[5] Roger Williams says that the New England Indians "Before ever they had Awle blades from Europe they made shift to bore this their shell money with stones."[6] Brickell asserts that "The Drilling is the most difficult to the *Europeans*, which the *Indians* do with a Nail stuck in a Cane or Reed, but whether they have any method in softening these Shells is uncertain. They rowl it continually on their Thighs with their right Hand, and hold the bit of Shell with their left; thus by degrees they drill a hole through it, which is a

[1] *Travels Through the Middle Settlements in North America, in the years 1759 and 1760*, etc., by Rev. Andrew Burnaby. (Third edition, London, 1798), p. 80.

[2] *The Natural History of North Carolina*, p. 338.

[3] *Ibid.*, p. 239.

[4] "New Netherlands," *Collections New York Historical Society*, Vol. I. (2nd series), p. 206

[5] Brownell: *The Indian Races of North and South America* (Hartford, Connecticut, 1861), p. 39.

[6] "A Key into the Language of America, or an Help to the Language of the Natives in that part of America called New England." London, 1643. Reprinted as Vol. I. of the *Collections of the Rhode Island Historical Society* (Providence, 1827), p. 129.

tedious Work, but especially in making their *Ronoak*, four of which will scarce make one length of *Wampum*."[1] On a previous page the same writer observes that the conch shells are very "hard and difficult to be cut, yet some *European Smiths* have tried to drill these *Shells*, thinking to get an advantage by them, but it proved so hard and tedious in the working, that nothing could be gained thereby, that they have intirely laid it aside for the *Indians* to manage, who never value their Time, so that they can make them according to their Fancy."[2] The Southern Indians, according to Jones,[3] pierced shell beads with heated copper drills. Schumacher states that the Santa Barbara Indians perforate shells with a flint drill.[4]

We have in the Museum an unfinished piece of wampum which is shown in figure *o*, plate IX. The edges have been rubbed but not enough so to make the bead perfectly round. The hole also has been only partly bored.

One of the principal shells used in the manufacture of wampum was the conch. The large *Busycon* was likewise used to a considerable extent. Wood says the Narraganset Indians formed their wampum "Out of the inmost wreaths of Periwinkle-shels."[5] Williams states that they made the white sort "Of the stem or stocke of the Periwincle, which they call, Meteaûhock, when all the shell is broken off." The blue sort was "made of the shell of a fish, which some English call Hens, Poquaûhock."[6] "Wampagne," says Mr. Gookin, another early writer, "is made artificially of a part of the wilk's shell."[7] Beverly writes that the Virginia Indians, besides their wampum made of conch shells, "They have also another sort which is as current among them, but of far less value; and this is made of Cockel-shell, broke into small bits with rough edges, drill'd through in the same manner as Beads, and this they call *Roenoke*, and use it as the *Peak*."[8] Cartier says the Hochelagans had a species of wampum known as *Esurguy*, which Sir J. W. Dawson thinks may have been "made of the shells of some of our species of *Melania* or *Paludina*, just as the Indians on the coast used for beads and ornaments the shells of *Purpura lapillus* and of *Dentalium*, etc."[9] Lewis H. Morgan says that "the primitive wampum of the Iroquois consisted of strings of a small fresh-water spiral shell called in the Seneca dialect *Ote ko-a*, the name of which has been bestowed on the modern wampum."[10] According to Dawson "The New England Indians used the hard shells of the 'Quahog' (*Venus mercenaria*), the purple spot at the posterior end of the shell forming the more precious blue wampum. The more northern coast tribes sometimes used the shells of the great clam (*Mactra solidissima*). The inland nations purchased wampum from those of the coast, and, like the Coast Indians, they used small shells perforated with holes. The wampum of the Iroquois,

[1] P. 339.

[2] *Ibid.*, p. 338.

[3] *Antiquities of the Southern Indians*, etc., by C. C. Jones, Jr. (New York, 1873), p. 230.

[4] Hayden Survey, *Bulletin 3*, 1877, p. 43.

[5] *New England's Prospect*, p. 69.

[6] *Key*, p. 128. Mr. Trumbull (in the *Publications* of the Naragansett Club, Vol. I. (Providence, R. I., 1866), "says that the Poquaûhock was the *Venus mercenaria*, the round clam or quahaug: the Meteaûhock was probably the *Pyrula carica* and *P. canaliculata*, which have retained the name of 'periwinkle' on the coast of New England." (Burrows edition *Jesuit Relations*, Vol. 3, p. 312; *note*).

[7] *History of Plymouth*, p. 70; *apud* Jones' *History of the Ojibway Indians*.

[8] *History and Present State of Virginia*, Book III., p. 59.

[9] *Fossil Men*, p. 32; *footnote*.

[10] *Fifth Annual Report on the New York State Cabinet of Natural History*, p. 73; *apud* Holmes.

and also the Hochelagans, was made of freshwater univalves, probably the *Melania*. They also ground into perforated discs for beads the pearly shells of freshwater Unios."[1]

"The utilization of shells for money," says Holmes "would naturally originate from the trade arising from their use as utensils and ornaments in districts remote from the source of supply. Yielding in the worked state a limited supply, and at the same time filling a constant demand, they formed a natural currency, their universal employment for purposes of ornament giving them a fixed and uniform value. They have undoubtedly been greatly prized by the ancient peoples, but on the part of the open-handed savage they were probably valued more as personal ornaments than as a means of gratifying avaricious propensities."[2]

But it is when we come to consider the amount of labor and time which was involved in the shaping and perforating of these beads that we can understand why they were regarded as the most precious possessions of the Indians. The time required to manufacture beads out of this intractable material was no doubt the chief consideration in determining their value. Among the Passamaquoddy, for instance, "a single bead required a full day's work to make and finish it,"[3] and Lindström, writing of the Indians of New Sweden, says that one person "cannot make more in a day than the value of six or eight stivers."[4]

Wampum has been valued as follows: In North Carolina, according to Brickell, "Four Cubits of this purchase a dressed *Doe Skin*, and six or seven are the purchase of a dressed *Buck Skin*." A little further on the same author says, "A *Cubit* of the *Indian* measure contains as much in length as will reach from the Elbow to the end of the little Finger. They never regard or stand to question whether he is a tall or short Man that measures it; but if this *Wampum* or *Peak* be of a black or purple Colour, as some part of the Shell, then it is twice the Value."[5] Beverly says of the wampum of the Virginia Indians: "The *Indians* had nothing which they reckoned Riches before the *English* went among them, except *Peak*, *Roenoke*, and such like trifles made out of the *Cunk* shell. These past with them instead of Gold and Silver, and serv'd them both for Money and Ornament. It was the *English* alone that taught them first to put a value on their Skins and Furs, and to make a Trade of them. *Peak* is of two sorts, or rather of two colours, for both are made of one Shell, tho of different parts; one is a dark Purple Cylinder, and the other a white; they are both made in size and figure alike, and commonly much resembling the *English Buglas* but not so transparent nor so brittle. They are wrought as smooth as Glass, being one-third of an inch long, and about a quarter diameter, strung by a hole drill'd thro the Center. The dark colour is the dearest, and distinguish'd by the name of *Wampom Peak*. The *English* men that are call'd *Indian* Traders, value the *Wampom Peak*, at eighteen pence *per* Yard, and the White *Peak* at nine pence. The *Indians* also make Pipes of this, two or three inches long, and thicker than ordinary, which are much more valuable."[6] We learn from Williams that of the white sort six were "currant with the English for a Peny," and of the black or purple kind "three make an English peny."[7] On page 129 he says,

[1] *Fossil Men*, p. 140.
[2] "Art in Shell," p. 235.
[3] Leland's *Algonquin Legends of New England*, p 305; *footnote*.
[4] Pennsylvania Historical Society, Vol. III., p. 131.
[5] Pp. 338-339.
[6] History of Virginia, Book III, pp. 58-59.
[7] *Key*, etc., p. 128.

"This one fathom of this their stringed money, now worth of the English but five shillings (sometimes more) some few yeeres since was worth nine and sometimes ten shillings per Fathome. . . . Their white they call *Wompam* (which signifies white): their black Suckaubuck (Sácki signifying blacke)." Schoolcraft tells us that "A single string of wampum of one fathom, rated at five shillings in New England, and is known, in New Netherlands, to have reached as high as four guilders, or one dollar and sixty-six cents."[1]

Wampum was readily adopted as a medium of exchange by the early white traders, not only in their transactions with the native Indians but also among themselves. "In Massachusetts 'wampampeag' was legal tender (Act of 1648) for all debts less than forty shillings, 'except county rates to the treasurer,'—the white, at eight for a penny, and the black at four for a penny."[2] Even in Canada, as late as the year 1792, "An Act to permit the importation of wampum from the neighboring States by the inland communication of Lake Champlain, and the River Richelieu or Sorel," was made legal at the First Session of the first Provincial Parliament of Lower Canada.[3] The Rev. Peter Jones, in his *History of the Ojibway Indians*, but who does not give his authority for the statement, says that "Wampum was first introduced at Plymouth, New England, as an article of commerce, by Isaac De Razier, a Dutch merchant, in the year 1627." The Dutch with their usual enterprise also introduced the lathe in manufacturing this curreney, thus polishing and perforating it with exactness; and, as Schoolcraft says, "soon had the monopoly of the supply of this article for the whole Indian trade."[4] In Schoolcraft's time it was still manufactured at Hackensack, in New Jersey, and in several towns in New York; there being even yet a demand for it by the Western fur traders. The factories in Jersey City employed German workmen to fabricate the wampum.

This shell money seems to have had a fixed value among the different tribes. Beverly, for instance, states that "These sorts of Money have their rates set upon them as unalterable, and current as the values of our Money are."[5] And Adair furnishes confirmatory testimony as to the truth of this statement. He says, "With these they bought and sold at a stated current rate, without the least variation for circumstances either of time or place; and now they will hear nothing patiently of loss or gain, or allow us to heighten the price of our goods, be our reasons ever so strong, or though the exigencies and changes of time may require it."[6]

The uses of wampum may be briefly summarized as follows: It was not only used as currency and ornaments, but was used for presents, or gifts; it was often paid as a ransom for a prisoner;[7] with it the Indians made atonement for crimes.[8] It was sent with messengers as their credentials, and represented the chief's authority. It has been used even among the Indians of the Six Nations Reserve, in recent years, as an important part of the "invitation stick." Among the Hurons, according to Le

[1] *Notes on the Iroquois*, etc. (Albany, N.Y., 1847), p. 357.

[2] Burrows' Edition *Jesuit Relations*, Vol. 3, p. 313. (See Ingersoll's "Wampum and its History," in *American Naturalist*, Vol. XVII. (1883), pp. 467-479.

[3] Quoted by Mr. Boyle in the *Fourth Annual Archæological Report* (1890–91), p. 52; *footnote*.

[4] *Notes on the Iroquois*, p. 357.

[5] Book III., p. 59.

[6] *History of the American Indians*, p. 170.

[7] Bressani's *Relation*, 1653, Vol. 39, p. 77.

[8] See Brickell's *Natural History of Carolina*, p. 339.

Jeune's *Relation* (p. 209, Vol. 17), wampum was used as a thank offering to their *Asewandic*, or familiar demon; and in the *Relation* of 1672-73 (Vol. 57, p. 277), we read of an Indian adorning a stone idol with wampum beads. The Jesuit *Relations* contain numerous references to the use of "porcelain" (which was the name given to wampum by the early French missionaries and explorers), not only among the Indians, but by the French themselves, in their dealings with the Indians. It was used as church offerings, and to obtain prayers for the repose of the soul, etc.[1]

Another use of wampum may be mentioned. Cadwallader Colden, in speaking of the Mohawk Indians, says: "All the Nations round them have for many Years, intirely submitted to them, and pay a yearly Tribute to them in Wampum."[2] And we learn also from Druillettes' *New England Tour* (1650-51) that the Iroquois exacted annual tribute in the shape of "porcelain" from the Sokouchiois, a tribe closely allied to the Algonquins.[3]

In the early days coin was scarce and paper money unknown, so that church offerings were often made with *seawan* by the Dutch settlers. Indeed, we have a parallel to the story of a gentleman in India paying for the building of a beautiful bungalow entirely with cowries (it required 16,000,000), the shell money of the Orient. Schoolcraft tells of a church on the Jersey shore, opposite New York, which was "constructed out of funds contributed, from sabbath to sabbath, in grains of *seawan*, by the Dutch people."[4]

"The name *Wampum*," says Holmes, "is often applied to shell beads indiscriminately, but frequently has a more restricted significance, referring to small cylindrical varieties used in strings and belts. It was known first in New England as *wampumpeag*, *wampompeage*, *peag*, *wompam* and *wampum*; the Dutch of New Sweden knew it as *seawan*, *sewant*, and *seawant*, while on the Virginia coast, it was called *peak*, a roughly made variety being known as *ronoak* or *roenoke*, a heavy, flattish beads pierced edgeways were called *runtees*. It is probable that all these names are American in origin, although there is some difference of opinion as to their derivation. Loskiel says that wampum is an Iroquois word meaning muscle, but according to Morgan, who is probably the best modern authority on the subject, the word *wampum* is not Iroquois in origin but Algonquin, as it was first known in New England as *wampumpeage*."[5]

Unless some of the perforated spiral shells and the disc-shaped specimens, described in a previous section, were regarded as such, no wampum of any kind so far as we know, has been found on a prehistoric village site in Ontario. The discoidal beads from the Rice Lake mounds, however, are undoubtedly prehistoric, as nothing at all suggestive of European contact was found in these mounds. Beauchamp says, "I have mentioned the lack of wampum among the early New York Iroquois, as a proof that they had not reached the sea; but it was not abundant even on the coast in prehistoric times. On early Iroquois sites it is not found, nor anything resembling it . . . . A few stray, prehistoric, small wampum beads might be expected low down in the Mohawk valley, but I know

[1] The reader who wishes to pursue the inquiry any further must be referred to the excellent edition of these *Relations* issued by the Burrows Co., of Cleveland; *sub voce* "Porcelain" in the Index Volumes.

[2] *The History of the Five Indian Nations of Canada*, etc. (Reprint, Toronto, 1902), Vol. II., p. xviii.; *Intro.*

[3] Burrows Ed., Vol. 36, p. 105.

[4] *Notes on the Iroquois*, p. 358.

[5] "Art in Shell," p. 239.

of none ; west of this they are absolutely unknown."[1] Hutchison, in his *History of Massachusetts* says "the Indian residents northeastward of the province of New York had originally no knowledge of this sort of medium or trade."[2] Lewis H. Morgan also doubts whether the earlier Indians used it as currency.[3] But Holmes says, "The great body of our historical evidence goes to show, however, that a currency of shell was in use among the Atlantic coast tribes when first encountered by the Europeans ;" and in another passage he maintains that the wampum industry was not introduced by the Europeans as some think. There is no question, however, but that the arrival of Europeans gave an impetus to the trade, especially after the introduction of machinery, whereby wampum was made more quickly. Loskiel asserts that the old wampum even was entirely disused. His words are worth quoting in this connection. "Before the Europeans came to North America," he says, "the Indians used to make their strings of wampom chiefly of small pieces of wood of equal size, stained either black or white. Few were made of muscles, which were esteemed very valuable and difficult to make ; for, not having proper tools, they spent much time in finishing them, and yet their work had a clumsy appearance. But the Europeans soon contrived to make strings of wampom, both neat and elegant, and in great abundance. These they bartered with the Indians for other goods, and found this traffic very advantageous. The Indians immediately gave up the use of the old wooden substitutes for wampom, and procured those of muscles, which, though fallen in price, were always accounted valuable."[4]

This shell-money appears to have been in use from Canada to Florida, and even as far south as Central America.

It is in its mnemonic use, however, that shell wampum has come into special prominence.

Holmes treats the subject in an admirable manner in his "Art in Shell," and his remarks are worth quoting.

"The wampum records of the Iroquois were generally in the form of belts, the beads being strung or woven into patterns formed by the use of different colors. By association simply they were made to record history, laws, treaties, and speeches—a fact, a law, a stipulation, or a declaration being 'talked into' a particular part or pattern of the design with which it was ever afterwards associated, thus giving additional permanency to tradition and bringing it one step further forward in the direction of written records. Such records were, of course, quite useless without the agency of an interpreter. Among the Iroquois, according to Dr. Morgan, one of the Onondaga sachems was made hereditary 'Keeper of Wampum,' whose duty it was to be thoroughly versed in its interpretation. But knowledge of the contents of these records was not confined to the Keeper, or even to the sachems. At a certain season each year the belts were taken from the treasure-house and exposed to the whole tribe, while the history and import of each was publicly recited. This custom is kept up to the present day. It is recorded by Ruttenber that among the Mohicans a certain sachem had charge of the bag of peace which contained the wampum belts and strings used in establishing peace and friendship with the different nations.[5]

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[1] Burrows Ed., *Relations*, Vol. 3., p. 314 ; *Intro*.

[2] Vol. I., p. 406 ; *apud* Holmes.

[3] Opp. cit., p. 71.

[4] Loskiel : *History of the Mission of the United Brethren among the Indians in North America*, translated by C. I. La Trobe, (London, 1794), Book I., p. 26.

[5] Ruttenber : *Indian Tribes of the Hudson River*, p. 43.

"Aside from records wampum was used in the form of strings and belts for a variety of purposes; some of them were probably mnemonic, others only partially so, being based either upon its association with the name of some chief or clan, or upon a semi-sacred character resulting from its important uses. It was employed in summoning councils, and the messenger who journeyed from tribe to tribe found in it a well-recognized passport. When a council was called it was presented by the delegates from the various tribes as their credentials; it was used in the ceremony of opening and closing councils, as was also the calumet; it assisted in solemnizing oaths and in absolving from them; white, it was a messenger of peace; black, it threatened war, and covered with clay, it expressed grief. 'White wampum was the Iroquois emblem of purity and faith, it was hung around the neck of the white dog before it was burned.; it was used before the periodical religious festivals for the confession of sins, no confession being regarded as sincere unless recorded with white wampom; further than this, it was the customary offering in condonation of murder, although the purple was sometimes employed. Six strings was the value of a life, or the quantity sent in condonation, for the wampum was rather sent as a regretful condonation of the crime, with a petition for forgiveness, than as the actual price of blood."[1] We readily recognize the influence of the Christian missionary, in a number of these symbolic uses of wampum.

* * * * * *

"The great profusion of wampum used in some of the later treaties is a matter of surprise. In a council held between four Indian ambassadors from New England and the French, thirty-six large belts were given by the ambassadors to thank them that their people had not been treated with hostility."[2]

* * * * * *

"Lafitau, whose statements are considered unusually trustworthy, as they were based chiefly on personal observation of the Indian tribes of Canada, gives the following very instructive account of the mnemonic use of wampum:

"'All affairs are conducted by means of branches [strings] and necklaces [belts] of porcelain [wampum], which with them take the place of compacts, written agreements, and contracts. . . . The shell, which is used for affairs of state, is worked into little cylinders of a quarter of an inch in length and large in proportion. They are distributed in two ways: in strings and in belts. The strings are composed of cylinders threaded without order one after another, like the beads of a rosary; the beads are usually quite white, and are used for affairs of little consequence, or as a preparation for other more considerable presents.

"'The belts are large bands, in which little white and purple cylinders are disposed in rows, and tied down with small thongs of leather, which makes a very neat fabric. The length and size and color are proportioned to the importance of the affair. The usual belts are of eleven rows of a hundred and eighty beads each.

"'The 'fisk,' or public treasure, consists principally of these belts, which, as I have said, with them take the place of contracts, of public acts, and of annals or registers. For the savages, having no writing or letters, and therefore finding themselves soon forgetting the transactions

[1] Morgan, opp. cit., p. 73.
[2] *History and Description of New France*, Vol. II., p. 256.

that occur among them from time to time, supply this deficiency by making for themselves a local memory by means of words which they attach to these belts, of which each one refers to some particular affair or some circumstance, which it represents while it exists.

"'They are so much consecrated to this use that, besides the name *Gaionni*, which is their name for the kind of belts most used, they bestow that of *Garihona*, which means a transaction; that of *Gaouenda*, voice or word, and of *Gaianderenfera*, which means grandeur or nobility; because all the affairs dignified by these belts are the endowment and province of the *agoianders* or nobles. It is they who furnish them; and it is among them that they are redivided when presents are made to the village and when replies to the belts of their ambassadors are sent.

"'The *agoianders* and the ancients have, besides this, the custom of looking over them often together, and of dividing among themselves the care of noting certain ones, which are particularly assigned to them; so that in this way they do not forget anything."

"'Their wampum would soon be exhausted if it did not circulate; but in almost all affairs, either within or without, the law requires a a reply, word for word, that is to say, for one belt one must give another, to be of about the same value, observing, however, a slight difference in the number of beads, which must be proportioned to the rank of the persons or nations with which they treat.

"'They do not believe that any transaction can be concluded without these belts. Whatever proposition is made to them, or reply given them, by word of mouth alone, the affair falls through they say, and they let it fall through very effectually as though there had been no question about it. Europeans, little informed or little concerned about their usages, have slightly inconvenienced them on this point in retaining their belts without giving them a similar response. To avoid the inconvenience which might arise from this they acquired the style of giving only a small quantity, excusing themselves on the plea that their wampum was exhausted; and they supplied the rest with packages of deer-skin, in return for which they were given trinkets of small value, so that transactions between Europeans and them have become a sort of trade.

"'Although all the savage nations of America make various kinds of ornaments of shells, I believe that it is only those of North America who employ them in transactions. I cannot even affirm that all of these do.'"[1]

Loskiel[2] also gives a good account, which is as follows: "Four or six strings joined in one breadth, and fastened to each other with fine thread, make a *belt of wampom*, being about three or four inches wide, and three feet long, containing, perhaps, four, eight, or twelve fathom of wampom, in proportion to its required length and breadth. This is determined by the importance of the subject which these belts are intended either to explain or confirm, or by the dignity of the persons to whom they are to be delivered. Everything of moment transacted at solemn councils, either between the Indians themselves or with Europeans, is ratified and made valid by strings and belts of wampom. Formerly they used to give sanction to their treaties by delivering the wing of some large bird; and this custom still prevails among the more western nations, in transacting business with the Delawares. But the Delawares themselves, the Iroquois, and the nations in league with them, are now sufficiently provided with

[1]Lafitau: *Mœurs des Sauvages Ameriquains*, 1724, Tome II., pp. 502-503 and 506-507; *apud* Holmes, p. 240, *et seq.*

[2]*Missions of the United Brethren*, Book I., p. 26.

handsome and well-wrought strings and belts of wampom. Upon the delivery of a string, a long speech may be made and much said upon the subject under consideration, *but when a belt is given few words are spoken;* but they must be words of great importance, frequently requiring an explanation. Whenever the speaker has pronounced some important sentence, he delivers a string of wampom, adding, 'I give this string of wampom as a confirmation of what I have spoken;' but the chief subject of his discourse he confirms with a belt. The answers given to a speech thus delivered must be confirmed by strings and belts of wampom, of the same size and number as those received. Neither the color nor the other qualities of wampom are a matter of indifference, but have an immediate reference to those things which they are meant to confirm. The brown or deep violet, called black by the Indians, always means something of severe or doubtful import; but the white is the color of peace. Thus, if a string or belt of wampom is intended to confirm a warning against evil, or an earnest reproof, it is delivered in black. When a nation is called upon to go to war, or war declared against it, the belt is black, or marked with red, called by them the *colour of blood*, having in the middle the figure of an hatchet in white wampom. . . . . They refer to them as public records, carefully preserving them in a chest made for that purpose. At certain seasons they meet to study their meaning, and to renew the ideas of which they were an emblem or confirmation. On such occasions they sit down around the chest, take out one string or belt after the other, handing it about to every person present, and that they may all comprehend its meaning, repeat the words pronounced on its delivery in their whole convention. By these means they are enabled to remember the promises reciprocally made by the different parties; and it is their custom to admit even the young boys, who are related to the chiefs, to their assemblies; they become early acquainted with all the affairs of State; thus the contents of their documents are transmitted to posterity, and cannot be easily forgotten."

Holmes says further; "The beads chosen as most convenient for stringing or weaving into fabrics were small cylinders from one-eighth to one-quarter of an inch in diameter, and from one quarter to one-half an inch in length. White strings or belts were sufficient for the expression of simple ideas or the association of simple facts, but the combinations of colors in patterns rendered it possible to record much more complicated affairs. In belts used for muemonic purposes the colors were generally arranged without reference to the character of the facts or thoughts to be intrusted to them, but in a few cases the figures are ideographic, and are significant of the event to be memorized. Strings cannot be utilized in this way.

"*Wampum in Strings.*—From Mr. Beauchamp's notes I have compiled the followiug brief account of the use of strings of wampum among the modern Iroquois. Six strings of purple beads united in a cluster represent the Six Nations. When the tribes meet the strands are arranged in a circle, which signifies that the council is opened. The Onondagas are represented by seven strings, which contain a few white beads; the Cayugas by six strands, all purple, and the Tuscaroras by seven strands, nearly all purple. The Mohawks have six strings, on which there are two purple beads to one white. . . . There are four strings in the Oneida cluster; these contain two purple to one white bead. The Senecas have four strings, with two purple beads to one white. The three nations which were brothers are represented by similar clusters.

"When a new chief is installed, the address delivered on the occasion is 'talked into' ten very long strings of white wampum. Three strings, mostly white, represent the name of the new chief. . . . When a chief dies he is mourned on ten strings of black wampum. If he has merely lost his office, six short strings are used.

"According to Mr. Beauchamp, possession of beads gives authority, and they are also used as credentials, or, as the Indians express it, 'Chief's wampum all same as your letter.' Such of these strings as remain in existence are still in use among the Iroquois, and are considered very precious by them, being made of antique hand-made beads.

"In the literature relating to our Indian tribes, we find occasional reference to the use of strings of wampum in ways that indicate that they were invested with certain protective and authoritative qualities, doubtless from their association with the name of some chief, clan, or tribe.

"It is recorded that on one occasion, Logan, the Mingo chief, saved a captive white from torture by rushing through the circle of Indians and throwing a string of wampum about the prisoner's neck. Through the virtue of this string he was enabled to lead him away and adopt him into his family."[1]

Nothing further can be added to this interesting account except a note explanatory of "branches" of wampum, which is of interest in connection with the above.

"Opinions differ as to the meaning of the term 'branches of porcelain.' Holmes translates it 'strings,' as used by Lafitau; but he says that the latter's use of this and other terms is somewhat confusing. Slafter (*Prince Champlain*, Vol. III., p. 150, *note*) says that 'branches were strings of white shells,' as distinguished from the purple. E. E. Taché thinks that they were twigs or sticks strung with large beads to represent ropes. Crawford Lindsay has seen, among old specimens of wampum, small beads strung on a long thread which was closely wound round a pliable stick or twig. He also mentions information given him by an educated Indian from Lorette, 'who says that he has frequently seen these porcelain branches. They consist of large beads strung on the fiber of the *ortie* (*urtica*, the nettle),—which is very tough, and which the squaws treated like flax, making from it strong threads,—or on slender thongs of caribou hide. Several of these branches are united on one stem, like the twigs of a tree-branch. Each he says, represents a *parole*, or *word*, of a discourse.' Dionne thinks that beads were strung upon the branches of a twig, which, being pliable, would simulate the withes used in binding prisoners."[2]

In plate xx. is shown one of these strings of wampum, which is in the Provincial Museum. For a description the reader must be referred to the *Archæological Report* for 1904 (p. 48). We have only one Iroquois wampum belt. This is traditionally regarded as not less than three hundred years old. It was buried with others for safe-keeping during the colonial war. The beads composing it are mostly white with several oblique bars of the purple variety, and these may have had some special significance.

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[1] "Art in Shell," pp. 247-248.

[2] Burrows Ed. *Jesuit Relations*, Vol. 27, p. 315; *note*.

V. Shells in Aboriginal Commerce.

It will now also be necessary to devote a little attention to aboriginal trade in whole shells. The presence of such shells as the *Busycon*, *Strombus*, and other varieties so far from their native habitat is one of the best evidences we have that relations more or less intimate existed between the widely separated tribes on this continent during prehistoric times. Thurston, in his *Antiquities of Tennesee*, says that "The ancient villagers of the Cumberland and Tennessee valleys must have been industrious and thrifty travelers and traders to have been able to bring or import from the far Gulf or South Atlantic coasts, by purchase or exchange, the vast number of articles manufactured from marine shells."[1] But how much more remarkable is it that these shells should even have reached Canada!

The shells of the *Busycon perversum* were most extensively used in this aboriginal commerce, and have been transported to great distances, being found in such widely separated localities as Tennessee, Ohio, Ontario, Michigan, Illinois, and Iowa. Professor Holmes says: "It is obtained along the Atlantic and Gulf coasts from Massachusetts to Mexico, and within the United States it is artificially distributed over the greater part of the Atlantic slope."[2] According to Sir Daniel Wilson the native habitats of *Busycon perversum* "are the Antilles, and the Bay of Campeachy on the mainland."[3] He says further, "It is obvious from the large and cumbrous size of the American *pyrulæ*, that they must have possessed some peculiar value or sacredness in the estimation of the Indian tribes of the northern regions, to encourage their transport from so great a distance through regions beset by so many impediments to direct traffic. Their transport to the Canadian lake regions appears to have been practised from a very remote period."[4] Mr. Boyle, also, in his *Notes on Primitive Man in Ontario*, says: "Ancient commerce with the south for large shells would seem to have exceeded that with the northwest for catlinite and copper, if we judge from what is exhumed, and notwithstanding the immense value that a large southern shell must have possessed by the time it reached this country, we occasionally find one or more[5] of them in graves, from the shores of Lake Erie to the Georgian Bay. It would not be an unfair comparison to estimate one as the equivalent of a gold watch, and yet they are placed side by side with the remains of departed braves."[6]

Dr. Wilson also reports *Busycon spirata* from an ossuary in Beverly township; which species he says is "peculiar to the western coasts of Central and South America." Considering the great distance, how long a time must it not have taken before it finally reached Canada.

Rau, mentions the fact that "unwrought columellæ of large sea-shells have been found at considerable distances from the coast, as, for instance, in Ohio and Tennessee."[7]

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[1] P. 309.

[2] "Art in shell," p. 192.

[3] "Observatio s suggested by specimens of a class of Conchological Relics of the Red Indian Tribes of Canada West, *Canadian Journal*, Vol. III., 1854-1855, p. 156.

[4] *Ibid.*, p. 157.

[5] According to Dr. Wilson, sixteen of these shells were found in a single ossuary in Oro township, Simcoe county.—*Canadian Journal* (second series, Vol. III., 1858), p. 399.

[6] P. 65.

[7] "Ancient Aboriginal Trade," p. 376.

Marginella, *Natica* and *Oliva* shells were found in the mounds of Ohio by Messrs. Squier and Davis. *Marginella* shells were also discovered in an Illinois mound.

A broken valve of *Mytilus edulis*, from the Atlantic coast, was found on a village site in Victoria county. This is now in the Laidlaw collection in the Museum.

We have another illustration of the wide extent of this aboriginal commerce in shells, in the finding of *dentalium* or tusk shells in mounds of the Mississippi valley. These were undoubtedly obtained from the Indians of the Pacific coast ; or, if these dentalia were natives of the West Indies, they may have reached Ohio through the Indians of the southern coasts of the United States.

Rau says that "more than a hundred years ago, it was noticed by Carver that sea-shells were much worn by the Indians of the interior parts —he chiefly refers to the Dakotas of the upper Mississippi—and reckoned very ornamental."[1]

Professor Holmes accounts for the origin of the trade in shells by assuming that these objects worn as ornaments were transported "to distant places by wandering tribes, exchanges would take place with other tribes, and finally a trade would be developed and a future commerce of nations would be inaugurated."[2]

Many of these shells, and the ornaments wrought from them, also may have been reprisals in warfare. It is well known that some tribes of the modern Indians made frequent warlike incursions into the country of their enemies, often over a thousand miles away. "Bands of Iroquois from central New York," says Thurston, "came all the way down the tributaries of the Ohio in their light canoes, and up the winding Cumberland, to enjoy the pleasure of pillaging and burning the houses of the less warlike Shawnees near Nashville. They sometimes pursued the Cherokees and Chickasaws to the banks of the Tennessee River."[3] Rau speaks of six hundred warriors of the Seneca tribe, who, in 1680, "invaded the territory of the Illinois, among whom La Salle sojourned just at that time, preparing to descend the Mississippi to the Gulf of Mexico. More than a hundred years ago, the traveller Carver learned from the Winnebagoes (in the present state of Wisconsin) that they sometimes made war-excursions to the south-western parts inhabited by Spaniards (New Mexico), and that it required months to go there." Rau concludes from this that "Similar excursions and migrations, of course, took place during the early unknown periods of North American history. In the course of such enterprises the property of the vanquished naturally fell into the hands of the victors, who appropriated everything that appeared useful or desirable to them. The consequence was an exchange by force—if I may call it so—which caused many of the manufactures and commodities of the various tribes to be scattered over the face of the country."[4]

A considerable impetus was given to the shell trade by the arrival of the Europeans on this continent, many of whom were soon engaged in it. Cabeça de Vaca was one of these early traders. In his *Relation* he tells us that he supported himself chiefly by trading, among other things, in flints, skins, sea-beans, mineral paint, pieces and "hearts" of sea-shells, shells used as cutting implements, and a smaller kind which passed as

[1] Opp. cit., p. 374.
[2] "Art in Shell," p. 188.
[3] "*Antiquities of Tennessee*," p. 83.
[4] Opp. cit., p. 349.

currency. He sometimes penetrated the country to a distance of forty and fifty leagues from the coast. The "hearts" of the shells were, of course, the columellæ. In much more recent times white traders have carried on this trade with the interior tribes, with considerable profit to themselves. Kohl, speaking of the Ojibways, on Lake Superior, says: "If the traders brought a large handsome periwinkle and held it to the Indians' ears, the latter were astonished, and said they could hear the sea beating in it, and would pay for such a miraculous shell, peltry to the value of forty or fifty dollars. There were also varieties of shells which they held in special repute: thus there was a long shell of the size of a finger, which in the Indian trade was worth more than its weight in silver."[1]

Conclusion.

In the foregoing the writer has endeavoured to treat of everything in the line of shell, not even excepting the apparently insignificant objects, for in such a study as archæology we must recognize the enormous importance of small things. As Holmes says, "The slightest modification of these relics by the hand of man attracts our attention, and from this infant stage of the art until the highest and most elaborate forms are reached they have the deepest interest to the student of human progress."[2]

This detailed treatment also had another purpose—namely, to bring to those searchers in the field the importance of preserving everything they find. Explorations are too often conducted in a perfunctory manner, and often by inexperienced collectors, who are more on the lookout for rarities than the commoner objects, and thus a great many interesting facts, which might be deduced from such finds, are lost to science. Especially is this true of land and fresh-water shells, which seem to be ignored by most collectors.

We have also endeavoured to present numerous extracts from the early writers and explorers on this continent; which, although quite familiar to professional archæologists, are nevertheless not accessible to a large number of readers of these reports—especially those not in touch with our larger metropolitan libraries.

It only remains to express our acknowledgments to Hon. F. R. Latchford, K.C., for kindly identifying most of the *Unios* and oceanic shells herein mentioned, and also to Dr. W. M. Beauchamp, Dr. A. L. Kroeber and Professor Holmes for information furnished. Our thanks are also due to Miss Elizabeth J. Letson, Ph. D., of Buffalo, for identifying *Olivella oryza* mentioned on p. 67.

[1] J. G. Kohl: *Kitchi Gami* (London, 1860), p. 135.
[2] "Art in Shell," p. 188.

THE KILLING OF WA-SAK-APEE-QUAY BY PE-SE-QUAN, AND OTHERS.

In the introductory remarks on "The Killing of Moostoos the Wehtigo," in our Report for 1903, p. 126, it was stated that the extracts were "presented as an ethnological, and, to some extent, as a psychological contribution rather than as a legal one." It would have been preferable had I said *purely*, instead of "to some extent," omitting any reference to "a legal" value, for of this it is devoid.

The evidence adduced as follows, in the trial of the Cree Indian, Pesequan, for the murder of his wife, Wa-sak-apee-quay, as a Wehtigo, although this word does not appear to have been used during the trial, brings out some new features in connection with Indian belief and superstition, and will be found interesting mainly for this reason.

Pesequan was sentenced to be hanged, but was subsequently reprieved, to undergo life imprisonment.

IN A STIPENDIARY MAGISTRATE'S COURT OF THE NORTHWEST TERRITORIES.

Before Mr. Commissioner Perry and a special jury.

His Majesty the King *vs.* Joseph Fiddler.

In the Council Chamber of the Hudson's Bay Company's Post, Norway House, in the District of Keewatin, in the Northwest Territories of Canada, at nine o'clock in the morning of Monday, the seventh day of October, 1907.

Indictment for Murder.

Superintendent W. H. Routledge, acting Sheriff of the Northwest Territories.

Mr. D. W. McKerchar appeared for the Attorney-General of Canada.

Mr. C. Crompton Calverley watched the case on behalf of the Indian Department.

Constable J. A. W. O'Neill, Clerk of the Court.

Mr. James Kirkness and Mr. William Crait sworn as interpreters (Mr. Crait did not act).

Mr. H. Ferguson sworn as stenographer.

On his arraignment the prisoner, the said Joseph Fiddler, an Indian and known among the Indians as Pesequan, pleaded guilty, and the Crown Counsel requested that a plea of not guilty be entered, considering the exigencies of the case; whereupon the Commissioner directed that a plea of not guilty be entered accordingly.

At this stage of the proceedings the Court adjourned until 10 o'clock, when the trial commenced before Colonel A. Bowen Perry, Commissioner of the Royal Northwest Mounted Police, having all the jurisdiction, powers and authority of a stipendiary magistrate, appointed under section 32 of the Northwest Territories Act, as amended by the Northwest Territories Act, 1907; and the following special jury was impannelled: Charles A. Wilkins (foreman), Harry Wright, James Garson, James Bagg, William Murray Chapman and Hans Christian.

JOHN ARTHUR WILLIAM O'NEILL, having been duly sworn, deposed as follows:

To Mr. MCKERCHAR:

Q.—What is your occupation? A.—Constable in the Royal Northwest Mounted Police.

Q.—Do you know the prisoner, Joseph Fiddler? A.—Yes.

Q.—When did you first meet him? A.—On the 15th day of June, 1907.

Q.—Where was it at? A.—At Red Deer Lake, in the District of Keewatin, very near Manitoba, as far as I could judge by maps that I have seen.

Q.—What were you doing at Red Deer Lake? A.—I made the journey to investigate rumors of murders which were said to have occurred there in the previous year.

Q.—What was the result of your visit? A.—I went with Constable Cashman. As a result of investigations we found that the prisoner had killed a woman named Mrs. Thomas Fiddler about the first of September, 1906.

Q.—And as a result of your belief that murder had been committed, what did you do? A.—We arrested Joseph Fiddler and charged him with this murder; knowing that it was useless to give him the usual warning in cases of this kind, we warned him not to say anything at all until he was brought to trial at Norway House.

COMMISSIONER: What was the date of the arrest? A.—The fifteenth of June, 1907.

Mr. MCKERCHAR: Do you know where Sandy Lake is? A.—Yes.

Q.—You visited that district also? A.—Yes.

Q.—In what direction is it from Red Deer Lake? A.—It is northwest. The whole of the lake is in the District of Keewatin. We found him, the prisoner, in the camp with his brother John at Red Deer Lake.

Q.—During the time that you were out there in that district did you meet any missionary or white man among the band? A.—No.

Q.—There was no one there to instruct them? A.—No one.

WILLIAM JOHN CASHMAN having been duly sworn, deposed as follows:

To Mr. MCKERCHAR:

Q.—What is your occupation? A.—A constable in the Royal Northwest Mounted Police.

Q.—Do you know the prisoner? A.—Yes.

Q.—When did you first see him? A.—On the 15th of June, 1907, at Red Deer Lake. Constable O'Neill was with me at the time.

Q.—State briefly what happened? A.—I left here on a patrol and met Constable O'Neill down on the lake and we travelled from Sandy to Red Deer Lake, and from evidence they had heard Constable O'Neill arrested Joseph Fiddler. We brought him to Norway House.

Q.—Where is Red Deer Lake located? A.—It is situated in the District of Keewatin.

Q.—How far is Sandy Lake from Norway House? A.—In the winter it is a journey of about 320 miles. By the way we came back I should think it would be about 500 or 600 miles.

Q.—Did you meet any other people out there except the members of the band? A.—No.

Q.—How far from that point was it that you met any white men? A.—At Island Lake; it is a 120-mile journey in the winter and 200 miles in the summer.

Q.—Who were the white people? A.—Mr. Campbell, in charge of the Hudson's Bay Company's post there, and Mr. McKersie, Methodist school teacher.

Owl Rae, having affirmed, deposed as follows:

To Mr. McKerchar:

Q.—What is your name? A.—Norman Rae.

Q.—What is your Indian name? A.—Na-po-quan-i-as, or nick-name, Mi-no-wa-pa-win or Eyelids.

Q.—Where do you live? A.—At Goose Lake.

Q.—Where is Goose Lake? A.—Goose Lake is a branch of Sandy Lake.

Q.—Do you know the prisoner? A.—Yes.

Q.—What is the prisoner's name? A.—I know his nick-name: Sandy. Pesequan is his Indian name.

Q.—Have you ever heard him called any other name besides those two? A.—No.

Q.—Have you ever heard him called Joseph Fiddler? A.—I heard O'Neill call him Joseph Fiddler, but nobody else.

Q.—Do you belong to the same band as the prisoner? A.—No, I belong to a different band.

Q.—What is the name of the band to which you belong? A.—The Crane band.

Q.—To what band does the prisoner belong? A.—I do not know.

Q.—To what band does your wife belong? A.—She belongs to the Sucker band.

Q.—Who is your wife's father? A.—The prisoner is her father.

Q.—Do you know the prisoner's son, Thomas Fiddler, who has been called here Thomas Fiddler? A.—Yes.

Q.—Do you know Thomas Fiddler's wife? A.—Yes.

Q.—What was her Indian name? A.—Wa-sak-apee-quay.

Q.—When did you last see her? A.—Last summer.

Q.—The summer that has just gone or the one before? A.—Earlier than this summer.

Q.—One summer earlier than this summer; what part of the summer was it? A.—About the middle of the summer.

Q.—Where was she at the time you last saw her? A.—She was at Sandy Lake, a little on this side of the Hudson's Bay Company's post.

Q.—Was she in her own camp at the time? A.—No.

Q.—Where was she? A.—I was there at Sandy Lake at the time visiting, and while I was there they brought the woman from some other place.

Q.—Who brought her? A.—The prisoner and his son Thomas brought her.

Q.—Is that the husband's name? And is that the husband of the woman? A.—Yes.

Q.—When they brought her to this camp what did they do with her? A.—When they arrived there they had two sticks and laid her on them and carried her up to the wigwam.

Q.—Was she ill at the time? A.—She was very sick then; she would not lie quiet.

Q.—Did they do anything with her to make her lie quiet? A.—They held her down.

Q.—How many were holding her down? A.—I could not tell how many; a lot of them.

Q.—More than the two that brought her in? A.—I cannot tell you how many held her down. There were more than the two who brought her. She was not in the wigmam at all. They left her outside. She was brought to the wigwam and they left her outside.

Q.—Did they put her in a wigwam by herself or with the others? A.—She was not in the wigwam and they left her outside.

Q.—How long did you remain at the camp that time? A.—They brought that woman late in the evening and I was there all the time until the next morning.

Q.—Did you leave the next morning? A.—The next morning I went to my work at the Company's place at Sandy Lake.

Q.—Did they have to hold her down during the whole of the night until you left in the morning? A.—Sometimes during the night I saw people holding her down. Thomas Fiddler was holding her down and sometimes I helped him during the night.

Q.—Were you the only two who helped to hold her down during the night? A.—Just the two of us were holding her down. The prisoner was there.

Q.—He took no part in holding her down? A.—No.

Q.—Did they take her into the wigwam or did they leave her outside all night? A.—They kept her outside during the night.

Q.—Did the rest of the band retire to the wigwam excepting Thomas Fiddler and the prisoner? A.—Where this woman was Joseph Fiddler and all his family had camped there, not in the wigwam, but outside.

Q.—Tell us how many there were in that family? A.—I cannot tell.

Q.—Could you tell what her appearance in the face was that night? A.—I did not know of any difference in appearance.

Q.—Could you recognize any difference in forms of sickness? A.—No.

COMMISSIONER: Was she sick? A.—I could not tell whether she was sick; anyway she was delirious and she could not keep quiet.

Mr. MCKERCHAR: Q.—Did she try to do any harm to any one in the camp? Did she attempt to hurt any one? A.—No. She could not hurt any one anyhow. She was that weak.

Q.—Did she scream or make any noise? A.—She was not screaming or anything like that, but she was trying to talk all the time. Sometimes we could not understand what she said.

Q.—You went away in the morning to work for the Company; when did you come back again? A.—I could not tell you whether it was at sundown or before sunset. It was very late. It was on the same day.

Q.—Did you see this woman on your return? A.—When I came back I did not see the woman. She was taken away then.

Q.—Where was she taken to? A.—A little to one side to where she was before.

Q.—Did you see her, where she had been taken to? A.—I went over during the night and saw where she was taken to.

Q.—Was she still delirious? A.—Yes.

Q.—Did she have to be held down when you saw her then? A.—When I went there nobody held her down and the prisoner had a string with the other man, the chief. The string was in their hands and the woman was lying there.

Q.—Was anyone holding her down? A.—No.

Q.—She was just lying still on the ground? A.—She was lying on the ground, but they had spread the cotton on the ground and laid the woman on it.

Q.—She was in that position when you first saw her at that time? A.—Yes.

Q.—What happened then? A.—Of the cotton she was lying on they pulled up the end of it and put it round her neck and they got the string in one knot or noose and strangled her. (Witness explains to the interpreter and to the court and by motions round his neck how the woman was strangled.)

Q.—Who was it that took the cord and strangled her? A.—The chief and the prisoner Joseph.

Q.—What was the chief's name? A.—Jack.

Q.—Did you see her at any time after she had been strangled? A.—I saw the body after that.

Q.—Where and under what circumstances? A.—I saw the body lying with the string round the neck and I went home and left the body there.

Q.—Before they put this cotton and string round her neck and while she was lying on the ground, did she say anything; was she talking? A.—I heard her say something, but I do not know what she said.

Q.—Did you return to the place where the body was after leaving it at that time? A.—Yes, I went there the next morning.

Q.—What did you see or what did you do? A.—I saw the body lying there again.

Q.—What became of the body after that? A.—I went over there in the morning and I saw the body lying there sewed up in cotton.

Q.—What became of it after that? A.—When we got there, Chawnee, or Sandy the prisoner told me that I had to take the body over to the Company's place and bury it there.

Q.—What did you do? A.—I dug the grave and after I had done the digging I put birch-bark in the bottom. Then I got sticks and put across the body and more birch-bark on top of the body, and I put earth on it.

Q.—Who was with you? A.—I only had a boy with me. I had the grave nearly finished when Thomas Fiddler came.

Q.—Did you and the boy take the body to the Hudson's Bay Company's post? A.—Yes, the boy and I buried the body.

Q.—Any one else with you? A.—No.

Q.—At the time that the prisoner and the chief strangled the woman was there anyone else there except you? A.—There were three looking on.

Q.—Who were the three looking on? A.—Angus Rae was there, but was not there at the time that the string was pulled.

Q.—Who was the other? A.—A brother of Angus, John Rae.

Q.—Where is he now? A.—The last time I saw him he was at Red Deer Lake.

Q.—Angus Rae is also a prisoner, and you can see him here in this court room? A.—Yes.

Q.—Who was the third man? A.—Myself.

Q.—Were there any others around there? A.—No, no others. When the two of those old fellows pulled the string only two were there, John and I. John Rae and I.

Q.—When did Angus come there—before or after they pulled the string? A.—Before the string was pulled.

Q.—And did he come back afterwards? A.—I do not know. As soon as they had strangled the woman I left—immediately the string was pulled.

Q.—Was there any one with you when you went back in the morning and found the body sewed up in cotton? A.—The father and the mother of the woman were there.

Q.—Any one else while you were present? A.—Nobody else.

Q.—Who were the father and mother of this woman; were they members of this band or members of some other band? A.—They belonged to the Sucker band.

Q.—When the prisoner asked you to bury the body was there any one else with you? A.—When the prisoner told me to go and bury the woman I was in the wigwam and everybody in the band heard him.

Q.—Where is the boy now who helped you to bury the woman? A.—The last time I saw the boy he was at Red Deer Lake.

Q.—Was he a member of the Sucker band? A.—Yes.

Q.—Do you know why the prisoner and Chief Jack strangled this woman? A.—I do not know why they strangled that woman.

Q.—Did you hear any one ask him to do so? A.—No.

Q.—Did you hear anything said about strangling her before you saw the chief and the prisoner Joseph in the act? A.—No. It was the first time that I knew anything about it when I saw them strangling the woman.

Q.—Did the accused Joseph ever say anything about them doing the strangling? A.—No, I never heard any words about it.

Q.—During that night when the whole family was gathered there was there anything said about putting her to death? A.—I never heard anything about it until I saw the string round her neck.

Q.—Did you hear any one raise any objection to putting this woman to death? A.—No.

Q.—Do you know of any others of that tribe in that vicinity having been put to death in the same way? A.—I heard of them doing that.

Q.—Do you know why they do it?

A.—They were scared that when they are sick that they will turn out to be cannibals, man-eaters, and will destroy them. That is what they do it for.

Q.—What class of sick people do they put to death in that way? A.—I do not know.

Q.—How do they decide when it is necessary to put a person to death on account of illness? A.—I do not know how it is decided.

Q.—Why did you not object to them putting her to death when you saw them strangling her? A.—I might have said something—I do not know what the law is.

Q.—Was this a law of the band that was being carried out? A.—That is the law from what I heard.

Q.—From whom did you hear it? A.—I don't know—everybody said it.

Q.—It is a matter of general conversation amongst the tribes? A.—Yes.

Q.—Do you know anything about the white man's laws? A.—No.

Q.—Have you ever been taught to distinguish between what is right and what is wrong? A.—No, I have never been taught.

Q.—Have you ever seen a white man before this time of coming out to Norway House? A.—I have seen a white man come down sometimes to Island Lake.

Q.—Did any white men ever speak to you about right and wrong, or did they have it translated to you? A.—No, I never spoke to them at all.

Q.—Did you ever speak to them about anything else? A.—No.

Q.—Did you ever hear a missionary or speak to one? A.—I saw a missionary at Sandy Lake once.

Q.—Did you hear him speak or hear what he said? A.—Yes.

Q.—Was it to the Sucker or Crane band that he was speaking? A.—I cannot remember that. I saw a missionary but I do not know which band he was speaking to.

Q.—You do not know who were there? A.—There were lots of people there.

Q.—Was the prisoner or the chief of the Sucker band there? A.—I do not know. I hardly remember. I cannot tell who were there. I do not know whether they were there or not.

COMMISSIONER: Q.—You stated that the chief and the prisoner Joseph were present at the strangling. Did the prisoner say anything while he was doing the strangling, either to the chief or to the woman? A.—After they strangled the woman the prisoner and the chief were talking, saying that they would do the right thing by the woman and would bury her right.

Q.—Did they say anything else? A.—No.

Q.—Did they say anything before they strangled her? A.—I did not hear them say anything.

Q.—Did they say anything to her while they were strangling her? A.—No.

Q.—Did they make any signs or incantations or hold any rites or perform any ceremonies? A.—The woman said something, but I did not understand her.

Q.—Did the prisoner answer her? A.—The woman was not talking to any one; she was just talking.

Q.—Did she struggle? A.—She did not do anything nor did she do any struggling.

Q.—Were her hands tied? A.—No.

Q.—How long were you there before they put the cotton round her neck to strangle her? A.—When I got there they had the string there and they were working at it while I was there and the woman was dead when I left.

Q.—Did you hold any part of the woman? A.—When they were to pull on the string to strangle her they asked me to hold her down, and they, the prisoner and the chief, asked me and John Rae to hold her hands down.

Q.—Did she try to get them away from you? A.—Yes, she tried to pull her hands away slowly, but we held her firm.

Witness explains to the court how the woman's hands were held down to her sides, clasping his own wrists in dumb motion.

Q.—On which side of the woman was the chief and on which side was the prisoner? A.—John Rae was on one side.

Q.—And you were on the other; where was the prisoner? A.—The woman was lying towards the south. The chief was on the left hand side of the woman with John Rae and the prisoner was on the right side with me.

Q.—What sort of cotton rag was it? You say that they wrapped a cotton rag round her neck and then put on the string?

Witness describes to the court and through the interpreter and by motions the method of strangulation employed.

A.—Only once they made a knot.

Witness ties a slip-knot and shows it to the jury.

Q.—Who pulled on that? A.—Joseph Fiddler on one end and Jack pulled on the other.

Q.—Until she was dead? A.—Yes.

Q.—Did the woman ask them not to strangle her? A.—No.

Q.—Why did you go back there that night after coming back from the Hudson's Bay Company's post? A.—The people told me that the woman was taken away from where she was and I went over there to see.

Q.—Were you told what she was taken away for? A.—No, I was not told.

Q.—How far away from the wigwam did they take her? A.—About the length of the council chamber of Norway House.

Q.—Was it in the open or was it in the bush? A.—Pretty well cleared except for a little willows on the ground.

Q.—Could they see from the wigwam to where this was going on? A.—They could not see clearly on account of these willows.

Q.—Could they hear the woman calling or crying out when she was strangled? A.—I do not know whether they could hear any noise that she made when they were strangling her.

Q.—Where was the husband, Thomas Fiddler? A.—The husband of this woman was in the wigwam.

Q.—When he came to the grave at the time of the burial by you did the husband remain there any time? A.—He remained there until the body was buried.

Q.—Did you ever see any one else put to death in the same way? A.—I never saw any one else put to death.

Q.—Were you ever in the camp or the wigwam when any one was put to death in that way? A.—No; but I have heard of it.

Q.—Would it be right for you to go and steal from the Hudson's Bay Company at Sandy Lake? A.—No.

Q.—Would it be right for you to go to the Hudson's Bay Company's post and kill the manager there? A.—No.

Q.—Would it be right to kill his wife? A.—No.

Q.—If the manager's wife were sick would it be right to go and kill her, do you think? A.—No.

Juryman Bagg: As far as I can understand him, the witness is holding something back.

Commissioner: Was the woman delirious when she was strangled? Or was she in the same condition as when you first saw her brought to the wigwam as when she was strangled? A.—She was in the same condition when she was strangled as she was when I saw her brought down there.

Q.—At the time of the strangulation was it the prisoner or the chief told you to take hold of the woman's hands? A.—The prisoner told me to hold the woman's hands, that she would be very strong.

Q.—What did he say to the chief? A.—He did not say anything.

Q.—Was that just as soon as you came up? A.—Yes.

Q.—Did the prisoner say anything to you when you came up and saw the woman lying on the cotton? A.—No.

Q.—When the prisoner told you to hold the woman's hands, that she would be very strong, did he tell you what he was going to do? A.—They were just ready to pull the string when the prisoner told me to hold her hands. They were just going to strangle her.

Q.—Did you see them make the preparations for the strangling? A.—Yes.

Q.—Did you not ask him why you were to hold her hands? A.—No.

Q.—Did you know what they were going to do? A.—Yes, I knew.

Q.—Why did you know? A.—When I saw them make ready for what they were going to do.

Q.—Did John Rae say anything to them? A.—I do not know. They did not say anything.

Mr. McKerchar: Q.—Did they have a fire near the body at the time she was strangled? A.—Yes, a camp fire was alongside the woman.

Q.—Could it be seen from the wigwam? A.—Yes.

Commissioner: Q.—After the woman was dead who went away first, John Rae, the chief, or the prisoner? A.—John Rae and the prisoner and the chief were there when I left.

Q.—Where did you go? A.—To the wigwam.

Q.—Did the prisoner go into the wigwam afterwards? A.—Both came in afterwards.

Q.—Did they say anything after they came in? A.—No.

It being lunch time, the court adjourned at this stage of the proceedings to meet again at 2.30 o'clock, when the case was resumed with Norman Rae still in the box.

To the COMMISSIONER:

Q.—You said that this took place during the summer before last; what time in the summer, were the berries ripe? A.—The berries were all ripe.

Q.—Was it cold at night, freezing? A.—I do not remember.

Q.—Do you remember when the interpreter, James Kirkness, arrived at Sandy Lake; did you see the interpreter at Sandy Lake? A.—I do not remember seeing him.

Q.—Before we went to lunch we were questioning you about the return of the chief to the wigwam; did the chief say anything about this in the wigwam? A.—He did not say anything.

Q.—When was it that the prisoner told you to bury the woman? A.—In the wigwam.

Q.—How long after you had returned from where the woman was killed? A.—It was not very long after.

Q.—Were there people in the wigwam when he told you this? A.—Yes, there were.

Q.—Did the prisoner speak out loud so that the others could hear? A.—He was speaking loud enough for everybody to hear, loud enough for anybody to hear.

Q.—When you went back to the tent did the people know that the woman was dead? A.—I do not know whether they knew or not.

Q.—When they heard the prisoner tell you to bury the woman, did they say anything to the prisoner then? A.—Yes, they knew about it.

Q.—Was this in the morning when the prisoner told you to bury the woman? A.—This was in the morning.

Q.—As to the first time, how long afterwards was it when the prisoner came in? A.—I could not tell you how long; it was soon after I came back that he came in. It was not daylight.

Q.—Were the people asleep in the wigwam? A.—There were some lying down and some were sitting up. I do not know whether they were asleep or not.

Q.—Did the prisoner speak to any of them? A.—I do not know.

Q.—Did the chief speak to the others? A.—I do not know whether the chief spoke to them or not. The tent is pretty long; I was at the other end.

Q.—Is your wife any relation to the prisoner? A.—The prisoner is the father of my wife.

Juryman WILKINS asks the following questions through the court:

Q.—How many times have they had a missionary visit them? A.—Once.

Q.—Is that all the times that you remember having seen a missionary? A.—That is the only time.

Q.—Were you ever told that the missionaries knew that this custom was among the people? A.—I do not know what the missionary was saying; I was too small to remember.

Juryman WRIGHT:

Q.—Were her hands up by the young woman's head or were they by her side? A.—Her hands were already down at her side before and when they were held. They were not at her head.

ANGUS RAE, having been duly sworn, deposed as follows, the witness having first stated that he believed in God and that he believed that he would be punished if he did not tell the truth:

To Mr. MCKERCHAR:

Q.—What is your name? A.—Angus.

Q.—Have you any other name? A.—Man-awa-pait.

Q.—Do you go by any other name? A.—I have another yet, another Indian name.

Q.—Have you another English name? A.—Rae.

Q.—You are an Indian? A.—I am.

Q.—To what tribe do you belong? A.—The Sucker band.

Q.—Where do you live? A.—Little Trout Lake.

Q.—Where is Little Trout Lake? How far is it from Sandy Lake? A.—There is a portage between Sandy Lake and Little Trout Lake.

Q.—How long a portage? A.—I do not know.

Q.—In what direction from Sandy Lake? A.—Right south from Sandy Lake.

Q.—Do you know the prisoner? A.—Yes.

Q.—To what band does the prisoner belong? A.—The Sucker band.

Q.—Do you know Thomas Fiddler? A.—Yes.

Q.—Did you know Thomas Fiddler's wife? A.—Yes.

Q.—What was her name? A.—Wa-saka-pee-quay.

Q.—When did you last see her? A.—Last summer.

Q.—This summer just gone by or the earlier summer? A.—The summer before this.

Q.—At what time during that summer was it that you saw her last? A.—About the middle of the summer.

Q.—Do you know of the division of time into months and years? A.—No.

Q.—Was it during the warmest part of the summer or was it when it was getting cool? A.—It was not in the hottest part of the summer; it was a little cool.

Q.—Was it after the hottest weather had gone by or before it came? A.—After the hottest of the summer had gone.

Q.—Do you remember seeing Mr. Kirkness down at Sandy Lake? A.—No, I do not remember.

Q.—Where was Mrs. Thomas Fiddler at the time you last saw her? A.—Sandy Lake.

Q.—Where was she at Sandy Lake? A.—Pretty near this end of Sandy Lake.

Q.—How far from the Hudson's Bay Company's store? A.—I do not know the distance, but it is farther than from here to the Methodist mission.

Q.—To what tribe did she belong? A.—Sucker tribe.

Q.—Was she in camp with the Sucker tribe when you saw her last? A.—I was away at the time she was brought there.

Q.—Where was she when you saw her? A.—When I saw her she was outside rolling round on the ground.

Q.—Was any one with her when you saw her there? A.—The mother of this woman was there and the mother-in-law.

Q.—Any one else? A.—Some women; I do not know how many.

Q.—Were there any men? A.—No.

Q.—What was the mother or the mother-in-law doing when you came there? A.—Holding her down.

Q.—Was there any one else holding her down besides the mother and the mother-in-law? A.—Nobody else but those two.

Q.—Why were they holding her down? A.—Because she was rolling around.

Q.—Do you know the cause of her rolling around? A.—I do not know what it is called. I do not know the cause. I left the wigwam.

Q.—Do you know whether she was sick or not? A.—Yes, she was sick.

Q.—Was she talking? A.—No, she was not talking.

Q.—Was she making any sound or noise? A.—Sometimes she made a noise like this: (Witness makes a noise like a woman moaning).

Q.—Did she say anything during the time that you were there? A.—I was not there long. I only just walked past where the woman was.

Q.—When you were passing, did you hear her at all? A.—I only heard her making that noise when I passed her.

Q.—When did you next see her? A.—I went out after supper; it was getting dark then.

Q.—What time of day was it when you passed her lying on the ground? A.—A little before sundown.

Q.—How long were you in the wigwam before you went out again? A.—It was a little after dark. The day sky was right overhead before.

Q.—Can you give any better idea as to the length of time that you were in the wigwam? A.—No, I could not give any idea as to how long I was in the wigwam.

Q.—Where did you come from to the camp that afternoon? A.—I came from the Hudson's Bay Company's post.

Q.—When did you go down to the post? A.—I started a little after sunrise to go to the Hudson's Bay Company's post to get some firewood.

Q.—Was this woman in the camp when you left in the morning to go to the post? A.—This woman was in there when I started and while I was away.

Q.—Who were out there besides the woman when you went out there after supper? A.—Jack Fiddler was holding her down.

Q.—Was any one else there? A.—There were some women there.

Q.—Do you know any of the women? A.—The mother and the mother-in-law.

Q.—Any others? A.—There were some others, but not near her.

Q.—Was the prisoner there? A.—He was a little to one side.

Q.—Had you seen the prisoner before this, after arriving home at the camp? A.—Yes, I saw him.

Q.—Where was he when you saw him? A.—He was in the wigwam when I came back from the Hudson's Bay Company's post. He was there during the night.

Q.—Were you in the wigwam during the night? A.—Yes. They were making a kind of shelter for the sick woman during the night, for the night.

Q.—Did you stay up during the night or did you go to sleep in the wigwam? A.—I went to sleep in the wigwam during that night.

Q.—Was there anything said by the prisoner about this woman's sickness? A.—No, I did not hear any one talking about it.

Q.—Did you hear them or any of them talking about her being sick? A.—I heard some one say that the woman would not live. I heard the husband say it.

Q.—Any one else? A.—Nobody else.

Q.—Did the husband or any one else say what would have to be done with the woman because she would not live? A.—No.

Q.—Did any one else but her husband say that she would not get better? A.—Nothing more was said.

Q.—Not by anybody in the camp? A.—No.

Q.—How long did you remain out there when you went out that night? A.—I was out there a good while before going into the wigwam.

Q.—What was done with the woman during the time that you were there? A.—When I came back the woman was lying on the ground, rolling. Nothing was done with her. No one was holding her.

Q.—Did she speak during that time? A.—No.

Q.—Did she make any noise? A.—Yes, she was making a noise, moaning.

Q.—After returning to the wigwam for the night, when did you see her again? A.—The next morning, when I was going to work I saw her as I walked past.

Q.—Was she then rolling about, as she had been the night before? A.—She was rolling and holding her arms up.

Q.—Was any one holding her down? A.—No, nobody was holding her down, but one was beside her.

Q.—Who? A.—Thomas Fiddler's aunt.

Q.—Were any other members of the band around at the time? A.—Some were sitting around.

Q.—Was there anything said by any of those sitting around in your hearing that morning regarding this sick woman? A.—The people that were there told me that the woman had never been quiet yet.

Q.—Was there anything further said? A.—No, nothing was said.

Q.—Did any one say anything as to what should be done with her? A.—I did not hear then. I started to work.

Q.—What time was it that you started to work? A.—The sun was a little up.

Q.—Did you hear any talk in the wigwam during the night with reference to this woman? A.—No, I was sleeping.

Q.—When did you return that day to the camp? A.—The sun was a little up when I returned.

Q.—Did you see the woman then? A.—No, I did not see her right then.

Q.—When did you see her next? A.—After supper that same day and it was getting dark then.

Q.—Where was she when you saw her then? A.—She was taken away from the wigwam towards the south.

Q.—Did you see her taken away from the wigwam towards the south? A.—No, I did not see them.

Q.—How did you know where she was? A.—Somebody told me that the woman was taken over there.

Q.—Who told you that? A.—My wife.

Q.—Did your wife tell you why she was taken over there? A.—No, she did not.

Q.—After you returned to the camp that night and before your wife told you where this woman was, did any one speak to you with reference to her? A.—No, my wife told me as soon as I got into the wigwam.

Q.—After your wife told you this and before you went over to see the woman where she was, did any one speak to you about it? A.—No.

Q.—Did they speak amongst themselves about it and not to you? A.—No.

Q.—Was there anything at all said that you heard? A.—No. I heard somebody in the wigwam saying that the woman would not live. Nothing else was said at that time.

Q.—How far from the camp was the wigwam when you saw her that night after supper? A.—About the length of the house, the Norway House council chamber, may be a little further.

Q.—Could you see her from the wigwam? A.—You could not see her from the wigwam because there were some bush and willows.

Q.—How did you know where to go? How did you find your way there? A.—It was getting dark and I saw the camp fire burning.

Q.—Where was the camp fire? A.—The camp fire was alongside the woman.

Q.—And you went out to where the camp fire was? A.—Yes.

Q.—Did you know why this woman was taken out to where this camp fire was? A.—No.

Q.—Did your wife tell you why she had been taken out there? A.—No, she did not tell me.

Q.—Did you hear any one say or give a reason for her having been taken out there? A.—No.

Q.—Were the people in the wigwam talking at all while you were in there? A.—No, they were talking in their own end.

Q.—Were they talking about this woman? A.—They were talking, but not about this woman.

Q.—When you went out there where was the woman? A.—When we went over there she was lying by the camp fire. The prisoner was there and Jack.

Q.—Any one else? A.—Norman and John Rae.

Q.—Were any of them talking when you got out there? A.—They were talking. Joseph and Jack had a string in their hands.

Q.—What did they say? A.—They were saying that they were going to strangle her and put her out of her misery.

Q.—Who said that? A.—Jack said it.

Q.—Who was Jack talking to when he said this? A.—He was talking to his brother the prisoner and to John Rae.

Q.—Did the prisoner say anything? A.—The prisoner says: It's all right.

Q.—Did John Fiddler, the chief, say anything else beyond that they were going to strangle her to put her out of her misery? A.—No, he did not say anything else.

Q.—Nothing else while you were there? A.—No, I did not hear him.

Q.—Did the prisoner say anything except that it was all right to put her out of her misery? A.—He said, It's all right. That is all he said.

Q.—Did you object to their putting her to death? A.—No.

Q.—Did you say anything? A.—I did not say anything. They were all older than I was and I did not say anything.

Q.—Would you be punished if you objected to anything that the chief suggested? A.—I do not know. They might.

Q.—Is a member of the band bound to obey the chief, bound to do what the chief says? A.—Yes.

Q.—Is a member of the band bound to do what the chief says? A.—Yes. If the chief tells me to do a thing I must do it.

Q.—What would happen to you if you did not do what the chief told you? A.—Something would happen to me.

Q.—Of what nature, of what kind? A.—I do not know what would happen. Something would happen, anyway.

COMMISSIONER: Q.—Good or bad? A.—Bad.

Mr. MCKERCHAR: Q.—From what source? A.—I do not know what would happen. Something would be wrong.

Q.—Would it be bad medicine? A.—I would be punished in some way, but I do not know how.

Q.—By whom? A.—I do not know by whom, but I would be punished, however, some way.

Q.—Did either John Rae or Norman Rae make any objection to the putting of this woman to death? A.—No, nobody made objection.

Q.—Was there any one else present excepting the four? A.—No, there were five of us; the prisoner and Jack and the other three I have named.

Q.—Was the woman lying quiet on the ground by the camp fire? A.—She was not quiet. She was lying on her back and rolling her head about and moving her hands.

Q.—Did she say anything? A.—No, nothing; but she moaned sometimes.

Q.—Did she hear the chief say that she would have to be put to death? A.—I heard the chief say it.

Q.—Did she hear it? A.—She must have heard him, but I do not think that she understood.

Q.—Did she say anything when the chief stated that she would have to be put to death? A.—She did not. She was not able to.

Q.—Did she make any sign or motion to indicate that she heard it? A.—She was rolling about when the chief was talking like this.

Q.—What was done with her then after the chief made this statement?

(Witness explains in dumb motion by a piece of cord how the deed was committed.)

Q.—What was done after the chief had made his remark?

(Witness again shows by actions how the deed was committed.)

A.—Before they put this string on they put cotton round her neck. Jack and Joseph did.

Q.—Which one did it? A.—Jack put the cotton round.

Q.—Who put the string round? A.—Both of them, Joseph and Jack.

Q.—What did they do with the string after it was put around her neck? A.—After they had everything ready my other brother was sick in the wigwam, and I went back to the wigwam.

Q.—On which side of the woman was the prisoner at the time that they were fixing the string? A.—Both were at the woman's head fixing the string when I left them.

Q.—One on each side? A.—Both on one side.

Q.—Did either of them have hold of the string or did both of them have hold of it? A.—I could not tell very well. It was kind of dark over their heads. The camp fire was away and I could not see.

Q.—Was the woman lying still while they were putting the cotton and cord round her neck? A.—No, she was not lying quiet.

Q.—What was she doing? A.—She was moving her head. She was swinging her hands.

Q.—Did she move her hands to prevent the cotton from being put on her neck? A.—She did not try to do anything like that.

Q.—Did she attempt to do anything to prevent it? Or did she say anything. A.—No.

Q.—Did she make any noise? A.—She made the same noise she did before.

Q.—Did the chief give directions to the prisoner as to how the cotton and the cord should be put on? A.—The chief gave directions. He said: "We will put the cotton round so that the cord will not cut the flesh."

Q.—Did he say anything more? A.—Nothing more was said.

Q.—Was anything said by the prisoner? A.—Nothing was said.

Q.—Was anything done with the cord besides putting it on the neck while you were there? A.—No, there was nothing done with the cord.

Q.—Do you know why the cord was put on? A.—The two men told me they were going to strangle her.

Q.—They both told you? A.—Yes.

Q.—Were you there when she was strangled? A.—No, I was not there.

Q.—How long were you away after the cord had been adjusted and before you came back to that place again? A.—I was from there a good while. I did not come back until morning of the day after.

Q.—How was the woman when you came back the next morning? A.—I saw the body lying there, wrapped up in white cotton.

Q.—What time of the morning did you go there? A.—The sun was up, but not very high.

Q.—Did you remain there very long? A.—I was not there long.

Q.—Was there any one near the body when you went out that morning? A.—Nobody was there. Nobody was around.

Q.—Did you see the body at any time after that? A.—I did not even see the grave where the woman was buried.

Q.—Were you in the wigwam when the prisoner and the chief came back that night? A.—I was sleeping when those two came back. I do not know when they came in.

Q.—When did you next see the prisoner after you saw them put the string around the woman's neck? A.—The next morning when I got up I saw them sitting in the wigwam.

Q.—Did you hear them speaking? A.—I heard the prisoner tell Norman to go and bury the woman.

Q.—Did you hear the prisoner say anything else? A.—No, he did not say anything else.

Q.—Did the chief say anything? A.—He might have said something, but I did not hear him say anything.

Q.—Do you know why the woman was put to death? A.—My wife told me that people were saying that the woman was going to turn into a cannibal. The people in the wigwam were saying this.

Q.—Was it before or after the death that your wife told you this? A.—Two days after the death.

Q.—What kind of cotton was put round her neck? A.—It was white cotton.

Q.—You cannot tell what kind of particular material it was? A.—No.

Q.—What kind of cord was it? A.—A line of cord double the size of this. (Witness holds the piece of cord in his hand with which he showed to the court the tribal method of strangling.)

Q.—Did you ever see any white men before you were brought in here by the officers of the Royal Northwest Mounted Police? A.—I saw a missionary once at Sandy Lake.

Q.—Who was the missionary? A.—Mr. Lowes.

Q.—How long was the missionary there at that time? A.—I do not know how long he was there. I saw him for half a day, anyway.

Q.—Did the missionary talk to your band at that time? A.—Yes.

Q.—Did you understand what he was saying? A.—No, I did not understand.

Q.—Was it translated to the band? A.—Yes.

Q.—What was the missionary discussing? What was he talking about? A.—I do not know what the missionary was talking about. I was not well at the time.

Q.—Were you out with the band at the time or were you in the wigwam? A.—The missionary was in the house. I was in the house.

Q.—Do you know anything about the white man's laws? A.—No.

Q.—Did you ever hear anything said about the white man's laws? A.—No. The only thing we ever heard about the white man was that he sent the Indian off to hunt furs.

Q.—Have you ever seen any other white man excepting Mr. Lowes? A.—I saw Campbell last fall.

Q.—What Campbell? A.—That white man who is in charge of the Hudson's Bay post at Island Lake.

Q.—Have you seen any other white men besides Mr. Campbell and Mr. Lowes? A.—I saw another white man last summer, but I did not speak to him.

Q.—Have you ever seen this missionary Paupanakiss? A.—No, not before. I never saw him out there.

Q.—What does the Sucker band, to which you belong, do to any one who is sick and cannot be cured? A.—One time I went over to the other camp visiting and I saw a man murdered. One time, I saw there a man murdered named David. After they murdered him they burned the body.

Q.—What tribe did this? A.—The same tribe.

Q.—What members of the Sucker tribe committed the murder in that case? A.—The prisoner was there and three other men: James Meekis, Joseph Meekis and Elias Rae, my brother.

Q.—Was the chief there? A.—He was not there.

Q.—Who was put to death at that time? A.—David Meekis.

Q.—Was he a brother of these other two that you have named? A.—He was their brother.

Q.—Did you see David alive before this murder was committed? A.—Yes, I saw David alive. When I went to bed at night David Meekis was alive.

Q.—What more? A.—While I was sleeping I heard somebody yelling and I went out and saw the body being put on the fire.

Q.—Did you see these parties commit the murder? A.—No.

Q.—Was David dead before he was put into the fire? A.—David was dead before he was put into the fire.

Q.—Why was David put to death by these people? A.—I do not know why he was put to death. I was not there long enough.

Q.—Was he sick? A.—Yes.

Q.—Was he sick at night when you went to bed? A.—Yes, he was very sick.

Q.—How was he acting? A.—He was siting up and making a big noise while he was breathing.

Q.—Was he delirious? A.—Yes, he was delirious.

Q.—Was he dangerous or was he likely to cause any harm to the people in the wigwam? A.—No, I don't think so.

Q.—Was he moving about or still? A.—He was moving.

Q.—Was he speaking? A.—Yes, he was speaking.

Q.—Could you understand what he was saying? A.—He was talking, but we could not understand him.

Q.—When was this? A.—I could not tell, but it was four or five years ago.

Q.—And where was the band located at the time? A.—A little on this side of Windy Lake.

Q.—And where is Windy Lake in relation to Sandy Lake? A.—Between Red Deer Lake and Sandy Lake.

Q.—Do you know of any other cases of sick people being put to death besides these two? A.—I saw another man fixed the same way long ago.

Q.—How old were you when this took place? A.—I was very small at that time.

Q.—In what tribe was it? A.—In the Crane tribe.

Q.—Who was put to death at that time? A.—I did not see any one put to death, but the body was burned when I saw it. I knew of it because I was told it was murder.

Q.—What was the name of the murdered man? A.—Ah-kamekesee-cowi-niew.

Q.—Where was it that you saw this body burned? A.—Pretty near the other end of Red Deer Lake and close to the Little Grand Rapids.

Q.—Had this man been sick before he had been put to death? A.—This man was very sick when somebody brought him and landed him in one side of the wigwam where I was.

Q.—Who put him to death? A.—I saw David Meekis and his brothers Lucas and Joseph Meekis and John Rae.

Q.—Were they the parties who put this man to death? A.—Yes, they were the parties. I did not see who murdered the man, but I saw the body.

Q.—You were told that these were the parties? A.—Yes.

Q.—Do you know of any other cases either among the Crane or the Sucker tribes? A.—No.

Q.—Have you heard of others? A.—Never heard of any others. It is only the Sucker band that works like this; the Cranes are all right.

Q.—To what tribe do the Meekis boys belong? A.—The Sucker tribe.

Q.—To what tribe does John Rae belong? A.—Sucker.

Q.—To what tribe did this man belong who was put to death some time long ago? A.—The Crane tribe. He was put to death by members of the Sucker tribe.

COMMISSIONER: Q.—Then you say the Crane tribe never do this? A.—Yes.

Q.—Why does the Sucker tribe do this? A.—I do not know. I never heard why they do it.

Q.—Did you ever hear the chief give any reason for having people put to death who were sick? A.—When they are sick and so long in misery they put them out of their misery.

Q.—Did you hear the chief say that? A.—Yes.

Q.—You heard him? A.—Yes.

Q.—What chief? A.—Jack.

Q.—Give the exact words? A.—Jack said that when any one was sick like that and is so miserable they might as well put them to an end.

Mr. MCKERCHAR: Q.—Did you ever hear them giving any other reason for putting them to an end? A.—No, I never heard him give any other reason.

Q.—Did you ever hear the chief say that any one who died in a delirium turned into a cannibal? A.—Yes, that is what the chief says.

Q.—Did you hear any one else say that? A.—Yes, I have heard men talking the same way.

Q.—What men? A.—All the men talk the same way, among them my brother, John Rae.

Q.—Did you ever hear the prisoner say that? A.—Yes, I heard the prisoner say that more than once.

The COMMISSIONER: O.—When? A.—Last summer.

Q.—Before this woman was strangled or afterwards? A.—Before she was strangled.

Mr. MCKERCHAR: Q.—You heard him say that several times? A.—Yes. (Witness then corrects himself through the interpreter and says that he only heard the prisoner say so once.)

Q.—What was it the prisoner said? A.—The prisoner said that if we do not strangle her she will turn into a cannibal.

Q.—At the time you heard the prisoner say this he was talking about this Mrs. Thomas Fiddler? A.—Yes, he was talking about Mrs. Thomas Fiddler.

The COMMISSIONER: Q.—It was on this occasion only? A.—Yes.

Q.—What did the prisoner say at that time? A.—If we don't strangle the woman she will be turned into a cannibal.

Q.—Did he say anything more at that time? A.—No.

Q.—And this was before or after she was strangled? A.—Before.

Q.—What would the result likely be if she turned into a cannibal? A.—I don't know.

Q.—Would anything happen to the band if she became a cannibal? A.—Yes.

Q.—What would likely happen? A.—She would kill people.

Q.—Would anything else happen to the band? A.—Nothing else but that.

Q.—To get back to the time of the murder in question, was the woman likely to cause any harm to the people in camp when you saw her first by reason of her delirious state? A.—I cannot tell.

Q.—Was she strong or weak? A.—She was pretty strong and two women were holding her down.

Q.—Was she strong or weak at the time you saw her at the camp fire? A.—She was pretty weak when she was at the camp fire.

Q.—At the time that they were about to strangle the woman was there any one else there? A.—No one else but these five: John and Norman Rae, the prisoner and the chief and me.

Q.—Were John and Norman Rae doing anything? A.—No.

Q.—Did you see John and Norman Rae touch the woman? A.—No.

Q.—Who decides when a man or woman is to be put to death? A.—I don't know who decides it.

Q.—Why did you go away when they were about to strangle the woman? A.—My brother was nearly dying; he was in the house.

Q.—Were you afraid? A.—The chief was going to put me out; I was afraid.

Q.—When a person dies a natural death how is he buried in your band? A.—Sometimes he is put in a coffin and buried, and sometimes he is wrapped in cotton and a blanket put on top.

Q.—Do the relatives attend and see the body buried? A.—All the band attends to see the body buried.

Q.—Did you ever know of any one turning into a cannibal? A.—No.

Q.—Were you ever told of any one turning into a cannibal? A.—No, it is an old story.

Q.—Had any other person been sick at that time in the camp? That summer? A.—A child died that time.

Q.—A natural death? A.—Yes.

Q.—Do they ever put any one to death for any other reason except for being delirious or insane? A.—No.

Q.—Would you think it wrong to do so? A.—Yes.

Q.—Do you think it is wrong to steal? A.—I know it is wrong to steal, besides Constable O'Neill told me when he was out there. I did not know it before.

Q.—Did you ever go and steal before you were told it was wrong? Did you ever go into the Hudson's Bay Company's store at Sandy Lake and steal things there? A.—I have never done that thing.

Q.—You did not do it, but did you think it was wrong to do it? A.—I knew all the things that were sent there were for people to buy and that I must not steal them.

Juryman WILKINS: Q.—Did you feel yourself bound to do things told you to do by the chief that you knew were wrong? A.—I would not do like that now.

Q.—How far does the witness live from Trout Lake? A.—I don't know.

Juryman WRIGHT: Q.—Can you remember any case where a person was punished by the chief or any person authorized by the chief for disobeying an order given by the chief? A.—I don't know.

Q.—Do they have to obtain the consent of the chief to put a person to death for delirium, or can they do it without his knowledge? A.—I am not quite sure. It may be the chief's order to put that person to death.

Mr. McKercHar: Was any one sick either before or immediately after this woman was sick? A.—Another daughter of the prisoner died after the woman was killed; a grown-up woman.

Q.—Was she also delirious? A.—They were travelling with her in the canoe. She died in the canoe.

Q.—Were any others sick just about that time? A.—Another man was sick at that time.

Q.—Delirious? A.—Yes.

Q.—Was this child who died delirious? A.—No.

Q.—Was any one else sick? A.—No, there was no one else sick.

The Commissioner: Q.—What did they do to the delirious man? A.—The man was brought to the wigwam of the Sucker tribe and the wife of this man was telling Jack to strangle the fellow. This woman was trying very hard for Jack to strangle the man. This was the wife of the sick man.

The next morning I went out with my nets. And my brother came down and I came up and he told me to come up quick. They were going to strangle a man; this man. And when I came I went up and I passed the wigwam where the sick man was.

I went up right past the wigwam. I had private work in the bush and my brother came to me. I came back to the wigwam; to where the wigwam was; the small wigwam.

When I was going along with my brother I saw a piece of string coming out from the wigwam and my brother told me to pull the string and I got the string and pulled it. And only then I knew that I had strangled a man.

It was Jack who pulled on the line the other side; the other end. After we had done I went back to the wigwam. I got frightened, as I only knew then that I had done wrong. I had strangled a man.

When I came back to the wigwam I saw the body wrapped up in a blanket. All the covering of the wigwam was pulled off and the body was lying exposed.

I and my brother helped to bury the man. We buried him about four feet down. I did not make a coffin, but I put in bark. On top of the body I laid cross pieces and put bark on that again and then I threw in the body. That is all.

Q.—After you pulled the string did you go into the wigwam? A.—No.

Q.—Did you know who was pulling on the other end of the rope? A.—Chief John.

Q.—How do you know that? A.—The prisoner told me that it was Jack at the other end. The prisoner was in the wigwam.

Q.—How do you know that the prisoner was in the wigwam? A.—The prisoner told me.

Q.—Which of your brothers told you to pull the string? A.—John Rae.

Q.—Did he tell you what you were to pull on the string for? A.—No, he did not tell me right then, but my brother told me down on the bank to come up and help to strangle a man.

Q.—Did you not know when you were pulling on the rope? A.—No, but I knew after.

Q.—What was the rope like? A.—Cod line.

Q.—What was the wigwam made of? A.—Birch bark.

Q.—Could you see inside? A.—No.

Q.—Could you hear any noise inside? A.—No.

Q.—No sound of any sort? A.—I heard the prisoner in there; talking.

Q.—To whom? A.—To his brother, the chief.

Q.—What did he say to his brother? A.—I did not understand; they were talking; that is all.

Q.—Were they not talking in your language? A.—Yes.

Q.—Then why did you not understand? A.—They were speaking very low.

Q.—How long after the woman was strangled did this take place? How many days? Ten days? A.—More than that.

Q.—Twenty days? A.—About that.

Q.—The summer was getting towards the end? A.—Yes.

Q.—Why, when you were asked before, did you not tell us about this other man being killed in this way? A.—I was leaving this till the last because they were Crane tribes.

Q.—Whom? A.—That man.

Q.—What was the name of that man? A.—It was Me-new-as-cum.

Q.—Had he any English or nick-name? A.—Yes, nick-name.

Q.—What was his nick-name? A.—It was Pe-wa-bic

Q.—And what was the wife's name? A.—I don't know.

Q.—To what tribe did they belong? A.—Crane.

Q.—His wife belonged to the Crane tribe also? A.—Yes.

Q.—Who brought him to the Suckers? A.—His wife.

Q.—What did she bring him there for? A.—I do not know.

Q.—Did you hear his wife urging that he be strangled? A.—Yes.

Q.—Who was she talking to? A.—She was talking to Jack Fiddler. She was talking to him all night and part of the next day.

Q.—Did you hear them talking together? A.—Sometimes during the night I heard them talking when I woke up.

Q.—Were there any others present besides Jack and Joseph? A.—I am sure that Jack, Joseph and my brothers were there.

Q.—Any others there when the man was strangled? Where was your brother Norman? A.—No. Norman was away down to Island Lake.

Q.—Have there been any other delirious men killed since then? A.—Not since that time.

The Reverend EDWARD PAUPANAKISS, having been duly sworn, deposed as follows:

To Mr. MCKERCHAR:

Q.—What is your profession, Mr. Paupanakiss? A.—Indian missionary of the Methodist denomination.

Q.—You are a full-blooded Indian yourself? A.—Yes.

Q.—For how long have you been a missionary? A.—For eighteen years since I was ordained. Before that I was a local preacher for eight years.

Q.—Where were you born? A.—Here at Norway House.

Q.—To what division of the Indian tribes do you belong? A.—I belong to this tribe at Norway House, the Swampy Crees, and I have spent the whole of my life in this district.

Q.—Have you ever been in the Sandy Lake district? A.—Never, but I have been as far as Island Lake.

Q.—Did you ever meet the Sucker tribe to whom the prisoner belongs? A.—Whenever I could I met them at the post at Island Lake. I go there twice a year for seven years.

Q.—Have you ever met the prisoner there? A.—I never knew him to meet him.

Q.—Did you ever meet the chief, Jack Fiddler? A.—Yes, I met him.

Q.—Did you often meet him? A.—Three times I met him there.

Q.—Did you ever speak to the tribe when you were there? A.—Every chance I had. During the time they were there, they were calling for their summer outfit, we had service in the morning and the evening. The longest they will stay there is four days and the shortest time they will stay there is two days.

Q.—Did you meet them on each visit during these seven years? A.—I could never meet them only just when I went to Island Lake. I saw this tribe twice every summer for seven years, fourteen times altogether, and I used to hold service with them each time.

Q.—Did you speak to them in your native language? A.—I tried to talk to them in their own.

Q.—You understand their language? A.—A little. I used to ask them if they understood mine and they told me that they easily understood me. On each occasion I preached to them on religion. I told them it was not right to steal; that it was against the law; anything which the Book forbade, which the Bible forbade, was not right..

Q.—Did any of them ever express their beliefs? A.—The old chief, Jack, with whom I had a long talk at Island Lake, stated that they believed their dreams.

Q.—What other beliefs did he express to you? A.—That that was their religion; their dreams are their religion.

Q.—Did he speak to you in any way about their treatment of the sick? A.—Never, never.

Q.—Did he speak to you about delirious people turning into cannibals if they abide in their delirium? A.—I don't believe that they ever told me anything about it. I remember it from very, very long ago.

Q.—Have you any knowledge of their belief along that line gathered from members of that band? A.—No.

Q.—Where did you acquire that knowledge, from that band or from your general knowledge? A.—From when I was a boy I heard our own people; from our own people in our own band; not from members of the Sucker tribe.

Q.—What else took place at that conversation with Jack Fiddler, excepting the long conversation on dreams? A.—That is all he said. That anything they dreamed was right for them; and that by virtue of their dreams and singing and conjuring in the tent that they would see meat, moose and deer. Jack Fiddler told me this. That is all that he told me.

Q.—That is the effect of all his talk at that time? A.—Yes, and that is the only time I talked.

The COMMISSIONER: Q.—Did you combat his belief? A.—Yes, I told him that it was not true at all.

Q.—And what reply did he make? A.—He said nothing at all.

Q.—Did you tell them that it was wrong to put any human being to death? A.—I did all that I could to make them understand.

Q.—Did you ever tell them that it was wrong to take human life? A.—I do not remember that.

Q.—Did you tell that to the band at Island Lake when you were talking to them? A.—I do not remember.

Q.—Did you ever know of these tragedies which we have heard of this afternoon? A.—No.

Q.—When did you first hear of it? A.—When I was down at Nelson House. It would be about 1877.

Q.—When did you first hear of the Sucker tribe doing this? A.—This summer, this case we are discussing to-day.

Juryman CHRISTIAN: Q.—Have you ever heard of them using poisonous medicines? A.—No one that I ever heard of. I have heard of it all over. But when I go there they never mention it.

Mr. McKERCHAR: Q.—When were you last at Island Lake? A.—In 1896.

The COMMISSIONER: Q.—You have not been to Island Lake for eleven years? A.—No.

It being six o'clock in the evening, the court adjourned for dinner, to resume the hearing of the case at seven o'clock the same evening, when the case was proceeded with, the case for the Crown being closed.

The COMMISSIONER: Do you understand that you have the right now to give evidence on your own behalf on oath to the court and jury?

PRISONER: A.—I would prefer not to give evidence myself, but I would like someone to speak for me.

The COMMISSIONER: You have that privilege.

His Worship instructs Mr. Calverley that he may address the jury on behalf of the prisoner, which the Indian Agent does on counsel rising to address the panel.

Mr. McKERCHAR: I move that the indictment be amended by inserting in the first line thereof after the words "an Indian," the words "and known among the Indians as Pesequan."

In accordance with this motion His Worship amends the indictment accordingly.

JUDGE'S CHARGE.

Mr. COMMISSIONER PERRY: Gentlemen of the jury, I am sure you realize with me the seriousness and importance of the positions we respectively occupy: you to decide upon the facts, and I to explain the facts and the law as they seem to me.

Counsel for the Crown has been hampered in his dealing with this case because of his desire to treat the accused fairly. The Crown Counsel, while performing his duty to the public, has endeavored to represent the prisoner's side, and you are able to judge how far he has succeeded in carrying out these duties.

Mr. Calverley has told you in a very eloquent manner of the condition of the Red man and of his superstitions and fears. Before dealing with that I would like to point out what you have to consider in arriving at a verdict.

The accused, Joseph Fiddler, or Pesequan, is charged with having killed Mrs. Thomas Fiddler, an Indian woman, on or about the first day of September, 1906, at or near Sandy Lake, in the Northwest Territories.

As Mr. McKerchar has explained, murder is the intentional killing or taking of a human life. You have to consider the facts brought out. You have to find out whether the accused intended to kill the woman.

What are the facts? The Indian is unable to fix an exact date. He has no knowledge of the day of the year or the month. However, the evidence shows that the summer before last, the summer of 1906, Mrs. Thomas Fiddler was brought to a wigwam in the vicinity of the Hudson's Bay Company's post, near Sandy Lake. Two witnesses, Angus and Norman Rae, give conversations of all that occurred.

Norman's evidence covers from the time that she arrived until the time that she was buried; Angus' from the time she arrived; and he leaves her in the hands of Joseph and Jack Fiddler. The evidence of these two witnesses do not disagree when they refer to the same period.

It is true that Mrs. Fiddler was very ill and was delirious. The Indians thought it necessary for their protection to confine her. She was held down by her mother and her mother-in-law with some of the other members of the band present looking on.

That evening a shelter was erected to cover her. Norman saw her under this shelter in the morning. She had disappeared in the evening. His wife told him she was at a camp fire a distance away about the length of this building we are in.

She was lying there on a cotton sheet. There were present the prisoner Joseph Fiddler, Chief Jack Fiddler, Norman Rae's brother John Rae, and himself. Almost immediately on his arrival the chief said: "We must strangle this woman; she is delirious and will not recover and will become a cannibal if we do not." The prisoner said: "All right."

They requested Norman Rae and John Rae to hold the arms of the deceased while they carried out their intention. Norman described in his graphic way how the arms of the deceased were seized and held by her side; how the chief and the accused stood on either side and wrapped her neck with a cotton cloth and put around the string and pulled on it and choked the woman until she died.

In corroboration of Norman we have Angus Rae. He says that he saw her; that she was delirious; how that the next day he went early to work, and how that on his return from work in the evening he was told that she was down at the camp fire.

He went there and found Joseph and Jack there. They declared their intention of choking the woman. He immediately left. This is a corroboration of what Norman Rae stated.

If you believe this evidence, Mrs. Thomas Fiddler came to her death through the hands of the accused. The law says that is murder. It devolves upon the accused to explain it either by justification or in some way to reduce the crime to justifiable homicide or manslaughter. With that in view a large amount of evidence was brought out this afternoon. The question is as to whether the accused was responsible for the act. To my mind the evidence is not clear as to the customs of the Sucker tribe.

The missionary, the Rev. Edward Paupanakiss, was unable to give us any evidence other than what had been told him by Chief Jack, but he said nothing about the treatment of the insane and the hopelessly sick. He discussed dreams and conjuring, but not all the beliefs of the Sucker Indian, not the actual belief of Joseph the prisoner and Jack. We have nothing whatever to show the belief of the prisoner.

The only thing we have is the evidence of Angus Rae, in which he says that the accused told him that if the woman was not killed she would become a cannibal and therefore a menace to the band.

If you believe that you will have to accept it all. You will then believe that this accused man was in the belief that if this delirious woman was not put out of her misery she would become a menace to the tribe by becoming a cannibal.

Does that pagan belief justify murder? You have to answer that. You cannot find anything but that Joseph Fiddler killed this woman.

Was he justified in killing her because she might have turned into a cannibal? This might be urged as a defence. The tribe was ignorant of the law of the land.

We questioned both the Indian witnesses as to that, and the impression left on my mind is that they do know what the law forbids.

When I asked Norman Rae would he steal or would he kill a white man, he said, no, it was wrong. Angus Rae also expressed that. In an ordinary case they knew that it would be against the law to steal or to kill. In any event ignorance of the law is no excuse.

It has been stated that that is a matter for the Executive; it is for the Executive to consider the question of clemency; that is a matter for the exercise of the prerogative of the Crown.

As to the question of pagan belief. If you find that the accused is justified in killing because of his pagan belief, where will it land us if we accept such a belief? What the law forbids no pagan belief can justify. The law says: "Thou shalt not kill." He cannot justify his act by pleading it.

However, you have a perfect right in spite of what I say, if you think that pagan belief would justify him, to say so, but consider first what the result would be. For as to his ignorance of the law that is a matter for Executive clemency.

Before committing this case to you, I wish to say that you can give any one of these three verdicts: Guilty, not guilty, or guilty of manslaughter.

I will now ask you to retire and to consider the verdict which you shall give.

Jury return and request a definition of the term, Guilty of manslaughter.

The COMMISSIONER: I shall read you the law on the subject from section 229 of the Criminal Code (1892), section 258 in the edition of 1896 as laid down here. The killing of a person is homicide. Homicide is culpable homicide and not culpable; a culpable homicide may be turned to manslaughter if done in the heat of passion. (His Worship reads the section in question.) That deals with the reduction of culpable homicide to manslaughter. Provocation is hard to show in the heat of passion.

The old definition was different between murder and manslaughter. Murder was killing with malice aforethought. Manslaughter was killing without malice aforethought.

It is a question of intent. Did the person intend to kill? If it is reduced to manslaughter—did the person intend to kill on account of some provocation which deprived him temporarily of self-control?

Juryman WRIGHT: What would it be if death were caused in self-defence?

COMMISSIONER: It would not be culpable at all if a man acted in self defence on sufficient grounds.

Juryman WRIGHT: For instance, in the protection of others?

COMMISSIONER: A man would be justified in protecting his immediate family or any one else from being killed. But the menace must be immediate. The danger must be immediate, immediate danger to himself or to some one under his protection.

Juryman WRIGHT: Did the evidence say anything about more than one wigwam?

The COMMISSIONER: There is only one wigwam referred to. I have an idea that they are all referring to the same wigwam near the Hudson's Bay Company's post near Sandy Lake.

Juryman WRIGHT: Will Your Worship read the old Criminal Code?

The Commissioner reads certain sections of the old Code defining murder and manslaughter.

The COMMISSIONER: With malice aforethought the man intended to kill; it was planned. Without malice aforethought the killing was sudden on provocation, by mischance or by carelessness. Take the case of a brakeman charged with manslaughter in a railway accident. He is properly charged with manslaughter because his neglect caused the manslaughter.

Juryman MURRAY: What is self-defence in connection with committing manslaughter?

The COMMISSIONER: The danger must be immediate and it must be an immediate and also a reasonable danger. It must be such a danger that he must act immediately, not a danger that may occur to-morrow or later.

Juryman WRIGHT: We have been restricted to guilty, not guilty, or manslaughter?

The COMMISSIONER: Yes, the jury may add any recommendation they like and any recommendation that they may add to the verdict will be transferred in the proper way to the Crown, to the Minister of Justice, who will deal with it for the Crown.

Juryman WRIGHT: Supposing we bring in or agree that the act was done in self-defence?

The COMMISSIONER: You can bring in a verdict of guilty, of murdering Mrs. Thomas Fiddler; not guilty, and a verdict of manslaughter, which reduces the charge against him from murder to manslaughter.

Foreman WILKINS: How long was the woman lying at Sandy Lake?

The COMMISSIONER: The murder took place two nights after she came there. She then seemed to be about the same, probably getting weaker. The next night, before the murder took place, she was on her back, throwing her arms about. The witness Norman Rae states that she tried to draw her arms away very slowly. He did not ask the question as to how long she had been sick before she arrived at Sandy Lake.

Juryman WRIGHT: Why did they object to taking the woman in to the wigwam where the rest of the family was?

The COMMISSIONER: There is no evidence to that effect.

Juryman WRIGHT: Was it ascertained the distance the woman was brought?

The COMMISSIONER: It was not ascertained.

Foreman WILKINS: Could we ask that question now of the witnesses?

The COMMISSIONER: No.

FOREMAN: Then the jury cannot come to any decision.

The COMMISSIONER: Kindly retire again, gentlemen, and consider your verdict.

9.20 p.m. Jury return.

Foreman WILKINS: Verdict of guilty, with a strong recommendation for mercy on account of the prisoner's ignorance and superstition.

The COMMISSIONER: I must thank you for your verdict and for the careful consideration that you have given a very difficult case, and I am bound to say that under the circumstances you have done nothing but what you have found to be your duty, and I agree with you in your verdict. I shall take great pleasure in forwarding your recommendation to the proper authorities.

Mr. MCKERCHAR: I move that the sentence of the court be pronounced.

The COMMISSIONER: Joseph Fiddler, the jury which has had you in charge has returned a verdict of guilty to the charge that is laid against you. They have strongly recommended that owing to your ignorance of the law and owing to the superstitious nature of your belief that you be mercifully dealt with. Joseph Fiddler, have you anything to say why the sentence of the court should not be passed upon you according to law? What have you to say?

The PRISONER: I did not know better. I was angry. I was in hopes I would be let off without being punished. I do not want my life to be taken away until my death comes. I wish that God had blest me. I have no wish to say any more.

The COMMISSIONER: Joseph Fiddler, an Indian, and known among the Indians as Pesequan, I have listened to your reasons as to why the sentence of the court should not be passed upon you. The law does not permit me to exhibit any mercy toward you. It is that he who commits murder shall be hanged.

It rests with the Governor-General in Council, representing the Great Father, the King, to extend toward you mercy. He alone can pardon you in this world. I can hold out to you no hope that a pardon will be extended to you.

You have been found guilty of the murder of Mrs. Thomas Fiddler by a jury of six men who have given you a fair and impartial hearing.

The evidence which has been given before the court disclosed that this is not the only case in which human beings have been done to death by yourself and other members of the Sucker band.

The law says that this must not be. The object of punishing you is not to revenge a death so much as it is to be a warning to the other members of your tribe that human life is sacred, and cannot be taken.

The sentence of the court is upon you, the said Joseph Fiddler, an Indian, and known among the Indians as Pesequan, that you be taken to the place from whence you came, namely, the Royal Northwest Mounted Police guard-room at Norway House, in the Northwest Territories, and that you be taken from thence on Tuesday, the seventh day of January next ensuing the date hereof, between the hour of six o'clock in the forenoon and twelve of the clock of that day, to the place of execution there, and that you be then hanged by the neck until you are dead; and may God Almighty have mercy on your soul.

FORM OF CHARGE.

Canada :
Northwest Territories.

His Majesty the King against Joseph Fiddler.

Joseph Fiddler, an Indian, and known among the Indians as Pesequan, now in custody at Norway House, in the said Territories, is charged by Daniel Willis McKerchar for that he, the said Joseph Fiddler, on or about the first day of September, 1906, at or near Sandy Lake, in the said Territories, did kill and murder one Mrs. Thomas Fiddler, an Indian woman.

Dated at Norway House, in the said Northwest Territories, this 7th day of October, 1907.

D. W. McKERCHAR,
for the Attorney-General of Canada.

The above indictment is amended on motion of Mr. McKerchar for the Attorney-General by inserting in the first line after the words "an Indian," the words "and known among the Indians as Pesequan," this 7th Oct., '07.

A. BOWEN PERRY,
Commissioner.

Canada :
Northwest Territories.

To the Sheriff of the Northwest Territories, and to all Constables and other Peace Officers of the said Territories, and to the Royal Northwest Mounted Police Force :

Whereas Joseph Fidler, an Indian, and known among the Indians as Pesequan, was, on the seventh day or October, 1907, at a court holden at Norway House, in the said Territories, before Aylesworth Bowen Perry, Esquire, Commissioner of the Royal Northwest Mounted Police, having all the jurisdiction, power and authority of a Stipendiary Magistrate, appointed under section 32 of the Northwest Territories Act, as amended by the Northwest Territories Amendment Act, 1907, with the intervention of a jury of six, convicted, for that he the said Joseph Fiddler, an Indian, and known among the Indians as Pesequan, at or near Sandy Lake, in the said Territories, on or about the first day of September, in the year of our Lord 1906, did kill and murder one Mrs. Thomas Fiddler, an Indian woman.

Whereupon it was adjudged by the said court that the said Joseph Fiddler, an Indian, and known among the Indians as Pesequan, be taken to the place from whence he came, namely, the Royal Northwest Mounted Police guard-room at Norway House, in the said Territories, and that he be taken from thence on Tuesday, the seventh day of January next ensuing the date hereof, between the hour of six o'clock in the morning and twelve of the clock of that day, to the place of execution there, and that he be hanged by the neck until he is dead.

These are therefore, in His Majesty's name, to command you, the said Sheriff, Constables and Peace Officers, and Royal Northwest Mounted Police Force, in your several and respective parts, to execute and carry into effect the sentence and judgment of the said court in the manner

required by law within the walls of the prison in which the said Joseph Fiddler, an Indian, and known among the Indians as Pesequan, may be confined at the time of such execution.

Given under my hand and seal at Norway House, in the said Territories, this eighth day of October, in the year of our Lord one thousand nine hundred and seven.

A. Bowen Perry,

Commissioner of the Royal Northwest Mounted Police, having all the jurisdiction, powers and authority of a Stipendiary Magistrate, appointed under section 32 of the Northwest Territories Act, as amended by the Northwest Territories Amendment Act, 1907.

I hereby certify that the foregoing evidence is a true and correct transcription of the shorthand notes of the evidence taken at the trial of His Majesty the King against Joseph Fiddler, taken by me in the Council Chamber at Norway House, in the Northwest Territories of Canada, on the seventh day of October, 1907.

H. Ferguson,

Reporter.

The foregoing notes on the killing of Wa-sak-apee-quay were kindly supplied at my request from Commissioner A. Bowen Perry, by direction of Frank Pedley, Esq., Deputy Minister of the Interior, Ottawa. To both gentlemen our best thanks are due. The evidence is extremely interesting, illustrating as it does some peculiar methods of Indian thought in a way that is more striking, because more natural, than in a direct form. Some of the iteration might have been avoided, but on the whole it was thought better to give the evidence *in extenso*. D. B.

It may startle many to learn that within the limits of the United Kingdom a deed, in not a few respects even more savage and in every way as cruel and unfeeling, happened not very many years ago—in 1905, purely as a result of gross superstition, of superstition fully as degrading as that which influenced the poor Crees of our North-West. The victim "was a handsome young woman, 26 years of age, who had been married for some years and had no children." When the doctor called to see her, "he found her suffering from nervous excitement and a slight bronchitis," but he said he "could see nothing likely to cause death," and he gave her some medicine.

The people, however (all her own relatives) knew exactly what was the matter—the poor woman was "onder a spell"—she was bewitched, or "had a witch in her," and it was therefore the duty of those persons to exorcise the being in possession, that "Richard might be himself again," or, as in this case, that Bridget might be.

To effect this her husband called for some offensive liquid to throw on her, which was done "several times," while her first cousins were "holding her down on the bed." . . . . The men at each side of the

bed kept her body swinging about the whole time, and shouting "Away with you. Come back (calling her by name) in the name of God!"

The witnesses who thus testified at the trial stated that they understood from this that the woman "was a witch" or "had a witch in her, whom they endeavored to hunt out of the house by torturing her body." The writer of the book supplying the information respecting this sad case says, "Some time afterwards she was lifted out of the bed by the men, or rather demons, and *carried* to the kitchen fire, and one said they had to use the poker on her to make her take the medicine." Four men held the woman in her night-dress over the fire, "her body resting on the bars of the grate, where the fire was burning." Her husband told her to answer to him three times, telling her name and his name. She did so, and the witness informed the court that all present "showed a feverish anxiety to get her answers before twelve o'clock." "After she had answered the questions, they put her back into bed."

When her husband was asked whether he was giving her the medicine ordered by the doctor, he said he "*had no faith in it,*" and that "*people may have some remedy of their own that could do more good than doctor's medicine.*"

During the night she left her bed, and dressing partly, went to the kitchen fire, where a number of visitors sat telling witch and fairy stories. At last one of the women made tea, and offered the sick victim a cup, but her husband jumped up and insisted that before drinking the tea she should eat three bits of bread and jam (evidently a survival of the ancient "ordeal by bread") being ordered to say as she accepted each bit, "I am (so-and-so) in the name of the Father, Son, and Holy Ghost!" On taking the third piece she failed to utter these words, when he threw her down, "put his knee on her chest, and one hand, forcing the bit of bread and jam down her throat" because "he suspected (still) that it was a fairy and not his wife."

Among other performances a lighted stick was held near her mouth, lamp-oil was thrown over her and she was set on fire, the husband insisting that it was not she he was burning, and he added, "you will soon see her go up the chimney."

By this time the poor woman was dead—as dead as Wa-sak-apee, the Cree woman!

The only object there is in quoting the last story, even in brief form, is simply to show the parallelism which so often exists between savagery and civilization, and if ethnological studies have any use at all, they should serve to warn us off primitive shoals, even although they may not clearly indicate good anchorage elsewhere. In many ways we yet have to combat with old time proclivities, and surely the murder of the young woman in 1905 illustrates one phase of persistence of early culture, even of a time comparatively recent when we were taught that we should "not allow a witch to live."

One might suppose that in both cases mentioned here, natural affection would have overcome all other feelings, but the influence of folklore and tradition were too strong and proved paramount.

It is also worthy of notice that at the trial of this Indian the proceedings were conducted with quite as much dignity as if white people alone had been concerned. D. B.

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